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I.—*Account of the expedition of CHACH (Chacha) extracted from the Chach Nameh, and extracts from the Tóhfát ul Khwán. By Ensign POSTANS.*

The original *Chach Nameh*, from which the following is taken, is the only known history of *Sindh*, authentic or otherwise, which affords any information on the state of that country, previous to its conquest by MUHAMMAD BIN CA'SIM, under the Khalif WALLID, in the year of the Haj. 92. It exists in the form of a Persian translation from the Arabic, in which it was originally written, by ALI BIN AHMED BIN ABU-BAKR KU'FIE, a resident of *Ooch*; but it is so defective, that much on the following, and other interesting subjects connected with the state of the country at that period, has been lost; the succeeding account, is all that can be given of an expedition led by the brahman CHACH when he usurped the sovereignty of *Sindh*, about the year 20 of the Hejira.

CHACH being firmly seated upon the throne of *Sindh*, and having appointed his brother as his deputy, inquired of BU'DHEMA'N, the minister of the late king, as to the divisions and extent of the empire, seeing that it was his intention to make a tour of his dominions, for the purpose of forming still stronger alliances with those chiefs who were friendly to his rule; whilst he punished, and subdued to his obedience, the discontented and seditious. BU'DHEMA'N informed him, that formerly the country had been divided into four great divisions, each having its ruler who acknowledged the supremacy of the sovereign; in which state it came to SA'HARS BIN DÍWAÍJ*, who was overthrown,

* *Diwaij* seems a corruption of *dwija*, 'the brahman:' and *Sahurs* resembles much the genitive *sáhasa* of our Saurashtra coins, of whom the first is a *swámi putra* or son of a brahman; but the date seems too recent. See Vol. VI. p. 385.—ED.

and killed by the Persians, under NÍMROZ; it then descended to SA'HASSÍ, a wise and virtuous prince, who made great exertions to improve the country, and who added much to the wealth of the public treasury; he observed, "Oh, CHACH, it is now in your possession, where may it long remain; Go therefore and see the country, for by so doing, and personally inquiring into its affairs, the dominion and power over this vast territory will be fully secured to you." CHACH approved of this advice, and having prepared a large force, set out to go towards *Hindostan*, which was close to his territories. After many marches he arrived at *Hissarpáyeh*, on the southern shore of the river *Bíás*; the governor of that fort, MALAK BAMEA'H, opposed his progress; engagements ensued; MALAK BAMEA'H was defeated, and fled to the fort where he entrenched himself. CHACH staid at this place some time, until, his supplies failing, he made a night march, and arrived at *Iskúnder*, which was a fortified place, and encamped near the city. Now in that fort was a person named MATYEH, who was well disposed towards CHACH, and the most influential man in the place. CHACH sent messengers to him, promising him the fort and the government of that part of the country, if he would contrive either to destroy, or imprison MALAK BAMEA'H, the governor of *Iskander*; and in order to ratify his promise, he delivered written agreements to MATYEH to that effect. This latter acceded to these conditions, and seizing an opportunity slew MALAK BAMEA'H by night, and brought his head to CHACH, who made MATYEH governor of the country, whilst the great people of the place paid visits, and brought presents to CHACH, acknowledging his authority. From this place, he proceeded towards the country of *Múltán*. Now in the city of *Múltán*, was a governor named BHU'JÍRAH, of the family of SA'HASSÍ the late king; when this man heard of the arrival of CHACH on the confines of his dominions, he came with a large force to the edge of the river *Ráwí*; his nephew SÍHU'D, was governor of the fort of *Sukeh* to the eastward of *Múltán*, and his cousin ASSÍ'N came with a large force to the edge of the *Bíás*, where he encamped for three months, until the water decreased, when he forded it, and came to join SÍHU'D, at the fort of *Sukeh*, which place CHACH besieged. The besieged held out for some time, until they became distressed, and much slaughter ensued on both sides. SÍHU'D then fled towards *Múltán*, and made a stand on the bank of the *Ráwí*; CHACH advanced upon *Múltán*, and BHU'JÍRAH prepared his forces and war elephants to oppose him. After much fighting and slaughter, BHU'JÍRAH was defeated, and fled for refuge to the fort, from whence he dispatched emissaries to *Cashmere*, telling the governors of that place, that the

brahman CHACH, with a powerful army was in the country, and that there would be no bounds to his conquests, unless they sent assistance to enable him to repel the invader. The messengers from *Cashmere* returned with the following answer: "The governor of this country is just dead, and his son is a minor: the army so far from being disposed to obey him, are rather inclined to be mutinous: we must first settle the affairs of our own state, before we offer to render you the assistance you require." On receiving this reply, BHU'JIRAH sued to CHACH for safety for himself, his family, and the whole garrison, when he promised to evacuate the place, and depart from the country: this was acceded to. The fort and whole country of *Múltán*, were taken possession of by CHACH, and BHU'JIRAH departed to *Cashmere*. After this acquisition of territory, CHACH proceeded to the temple, where he prostrated himself before his gods, and made his oblations: after having appointed a *Thákur* as his deputy to govern *Múltán*, and the governors of *Malud*, *Karud*, and *Ishpahar*, having proffered their allegiance, CHACH proceeded towards *Cashmere*, to the boundaries of which country he arrived without any opposition, because, when God raises a man to power, he facilitates all his difficulties, and gratifies all his wishes. So CHACH proceeded from stage to stage until he arrived at the fort of *Shah Kúlhar*, higher up than *Kísa*, and which is situated upon the confines of *Cashmere*; here he halted for one month. Some of the neighbouring chiefs were refractory, whilst others acknowledged obedience: he formed new alliances, and strengthened old ones, with many of the nobles, and when affairs were settled, he sent for two young trees, one a willow and the other a fir; these he planted on the borders of the country of *Cashmere*, on the edge of the river which is called *Panj Mahiyát*, near the hills of *Cashmere* whence it rises; he remained here until the branches of the trees met, and then decreed, that they should be considered as the boundaries of the two territories, on that side was to belong to *Cashmere*, on this to *Sindh*. After this he returned to *Alor*, where he remained for one year. Having now completely settled the affairs of the country to the eastward, CHACH observed to his minister BU'DHÉMA'N, that it would be necessary to make a journey to the southward and westward; whereupon he proceeded to the fort of *Búdhapur* and *Secústán*, the governor of which latter place was named MATTEH. From a place called *Dahtamat* (which is a boundary between *Sammah* and *Alor*) he went to *Búdyeh*, whose governor was the son of KOTUD. The capital of the country was *Kakaráj*, the residents of which are called *Sawís*. CHACH attacked them, and took the fort. KA'KEH BIN KA'KEH came to CHACH, and asked for safety for his father

and family, promising to pay tribute and be obedient. CHACH then proceeded towards *Secústan*. MATTEH the governor came out to battle, but was defeated and fled to the fort, where he was besieged. After a week, CHACH took the place, and reinstating MATTEH as the governor, left agents of his own there for its greater security. Here he staid for some days, until all the affairs of the country being settled, he sent messengers to *Brahmanábád*, to the governor AKHAM LOHA'NA', who had also charge of the provinces of *Sakeh*, *Sammah* and *Suhuteh*, to bring him to obedience. The spies who had been stationed on the road, which is a few days' journey from *Makrán*, intercepted a letter which AKHAM had written to MATTEH wherein it was thus written: "Your letters have arrived: whilst I live I will prevent any person from encroaching upon my dominions. Who is this CHACH that I should fear him? a thousand such have come and departed, who is not a king, but a brahman; you are free to travel in my dominions, from *Brahmanábád* to the sea at *Díwul*, no one shall molest you, nay, I will assist and protect you, for I am powerful." CHACH on reading this, wrote to AKHAM thus: "You are proud of your power and bravery, but be not too confident; it is true that the countries I possess were not mine by inheritance, but they are the gifts of God who protects me, and whose assistance I alone supplicate. It is in this way that I have always overthrown my enemies."

CHACH marched to *Brahmanábád*. AKHAM LOHA'NA was not at that time there, but in another part of his dominions; but hearing of the arrival of CHACH, he hastened to oppose him. After a great battle and much slaughter AKHAM was defeated and besieged in his own fort.

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The following are from the *Tufat ul Khván*.
Methods of deciding the innocence or guilt of persons accused of misdemeanours.

1st. It is a practice with these people (although a foolish one*), when any person is accused of theft, to give him the trial by fire: if he passes through the flames unhurt, they conclude him innocent.

2nd. Another plan is, to place an iron spade heated to a white heat

* NOTE.—These, or practices equally ridiculous, are at the present day common in *Sindh*. Since writing the above, I have been informed by a most intelligent native (SAYAD AZAMUDDÍN) for some time resident at *Vikhar*, as British agent at the mouths of the *Indus*; that the most approved method at present in use amongst these people, is for the accused to dip himself clothed in the river, from whence if he emerges with his body dry, he is beyond doubt innocent of the crime laid to his charge! Truly, such methods of administering justice must leave the accused but a sorry chance of escape; whether innocent or guilty.

upon the palm of the hand; some green leaves are tied together with raw silk, and placed upon the heated iron: if the accused be innocent, the leaves remain unburnt and the hand uninjured; (as has been frequently observed) but if guilty, both the leaves and hand are burnt. For example, a certain woman stole a pair of *siwárehs*, (kind of ornament) from another woman, and denied the theft, whereupon, they agreed to decide the question by means of the heated spade. The accused placed the articles stolen in a basket, covering over and concealing them with cotton, and previously to undergoing the ordeal, gave the same to the owner of the *siwárehs*: then, fearlessly lifting the spade, she returned it to the ground unhurt, although the heat was so great, that it scorched all the surrounding earth. The accuser, enraged at seeing the woman, whom she knew to be guilty, escape without injury, threw down the basket, when the ornaments rolled out, and the truth became apparent.

3rd. They sink the foot of a post in deep water: the accused is directed to dive to the bottom of the post; at the moment that he does so, an arrow is thrown, and a person dispatched to bring it; the post is then moved, if the accused be guilty, he rises to the surface, but if innocent, he is enabled to stay in the water.

Magic and Divination.

These people are great magicians; one woman will charm away the butter from the curds of another, and add the quantity to her own. For instance*, I was once the guest of a woman in a village who had prepared her curds for butter, when under pretence of asking for fire, she proceeded to the house of a neighbour, whose curds she saw were also ready; my hostess returned, and in a short time by dint of powerful charms, produced as much butter from the produce of one cow, (which was all she possessed) as could scarcely have been produced by ten cows. Their best method of divination is by means of the blade-bone of a goat. The following once occurred.

A party of hillmen being pursued by enemies, left their stronghold, and fled to the plains; they had amongst their number, a *Máneh Sang*, (so this description of diviners are called). On the road they found the blade-bone of a goat, and requested the diviner to tell them how far their pursuers were behind. He looked at the bone and reported that they were close upon them. He was then directed to point out the best means of escape; he ordered them to sprinkle the contents of their

* This is quoted from the author of the *Tohfut*, who speaks in the first person.

mussocks upon the ground, and pass over it; they did so, and proceeded on their journey. In a short time, the other party arrived, having also with them a *Máneh Sang*, who, looking at the water and the direction the pursued had taken, told his companions that there was no use in proceeding further, as the enemy had crossed the (water), they accordingly gave up the pursuit.

Tracking footsteps, and Omens.

These people are wonderfully expert in the art of tracking footsteps; they can distinguish those of friends from strangers, old from young, nor do they lose the track over any kind of ground. Some can also divine from the noise of birds, particularly from that of the woodcock or quail, both of which are birds of great omen. I was once with a person who said to me, come along quickly, for, from the omens of the birds I know that guests have arrived at my house, as also, that a certain person is dead. It proved to be as he had predicted.

Stories.

No. 1. In the time of OMAR SUMRAH, two extraordinary circumstances occurred, which I will relate: 1st, a beautiful girl named MÁHRU'Í, who resided at *Talhár*, was betrothed by her family to a person named PANU', but afterwards given in marriage to another. PANU' enraged at what had occurred, determined upon revenge, and with this intent, reported to the king OMAR, that MÁHRU'Í was exceedingly beautiful, and fit only to be an inmate of his harem. OMAR on hearing this, disguised himself, and mounting a swift camel proceeded in search of the beauty; he found her, and being enraptured with her charms, seized the first opportunity of carrying her away. MÁHRU'Í's virtue however was proof against all the king's entreaties, and after a year had passed in vain endeavours to gratify his desires, he sent for the husband, and resigned her again to his care. Notwithstanding OMAR's assurances to the contrary, the man's mind was infected with doubts as to his wife's purity, nor did the taunts he underwent from his tribe, on the subject of her residence with the king, diminish these suspicions; in short, he ill treated MÁHRU'Í, and did not scruple openly to curse OMAR, as the cause of his misfortune and disgrace. These circumstances, reaching the ear of the king, in a transport of rage he headed a body of troops, determined to inflict summary punishment upon the whole of that tribe; but MÁHRU'Í interceded to dissuade him from so cruel and unjust a proceeding, pointing out, that the fault was his own, in keeping a stranger's wife so long in his own house. Whilst in order to satisfy her husband's doubts, and set his mind at rest, she underwent the trial by fire, and coming out unscathed, proved to

him and all the tribe, that she was spotless. They then lived together in the bonds of affection.

Súsi and Panún.

2. In the city of *Bahanpurweh*, resided a rich man, whose wife after remaining for many years childless, brought forth a daughter; the father's happiness at the event was very great, but on consulting the astrologers as to the future fate of the child, they predicted, that she would marry one of the Muhammadan persuasion. In order to prevent the disgrace which must attend such a connection, the father determined to destroy the infant; and for this purpose, placed it in a box which he threw into the river. By chance, it floated to the city of *Bahanpore*, and was picked up by a man in the employ of a dhobí of that place. He took it to his master who opened it and found the child alive. Being without children himself, he adopted the girl as his own. In time *Su'si'*, (for so she was called,) became so renowned for her beauty, that whenever she went abroad, she was followed by a large concourse of the people of that city. Now it happened, that a large caravan of merchants from *Kish* and *Makrán* halted at *Bahanpore*, and some of these, having seen the girl, on their return, reported her beauty to *PANUN*, the son of the governor of *Kish*. He became enamoured of her description, and disguising himself as a merchant, travelled with the next caravan to the city of *Bahanpore*, for the purpose of satisfying himself as to the truth of the reports he had heard. The better to carry his purpose into execution, he entered the service of the dhobí, and soon contrived to see *Su'si'*, whose real charms exceeded all description. In a short time, he made her acquainted with his passion, which she returned; and by the consent of the dhobí, they were married.

When the intelligence of this reached *PANUN*'s father, he was annoyed at the connection which his son had formed, and dispatched other two of his sons to bring their brother back. They arrived at *Bahanpore*, and took up their residence near the house of the dhobi where their brother lived, until watching an opportunity, they one night seized *PANUN*, and placing him upon a swift camel, returned with him to their father. The grief of *Su'si'* on discovering the abduction of her husband knew no bounds; she determined to follow him, and took the road to *Kish*. After travelling for about 40 kos from the city, overcome with thirst and fatigue, she fell exhausted to the ground, but in so doing, her foot struck a stone, and immediately there gushed forth a spring of limpid water, with which she quenched her thirst; this same spring yet remains, nor was it ever known to become dry, even in seasons of great drought, when all the

tanks, and other springs in the country, have been parched up. *SU'SI'*, in commemoration of the goodness of God in thus miraculously affording her assistance, planted a sprig of the tree from which henna is procured, on the edge of the spring. The tree is to be seen there at the present day.

Proceeding onwards towards the hills, she was again distressed with fatigue and thirst, in which situation a shepherd observing her, and being struck with her extreme beauty, advanced for the purpose of offering her violence; by entreaty however, she prevailed over him sufficiently, to induce him to desist from his evil designs, until he had first satisfied the thirst with which she was tormented. Whilst the shepherd returned to procure her some milk, *SU'SI'* prayed to the almighty to release her from her manifold calamities; her supplications were answered, the hill whereon she stood opened, and she entered the fissure which closed after her, leaving only the edge of her garment visible, as a proof to the rest of mankind of the power of God, and to direct her husband *PANU'N*, to the spot. When the shepherd returned, and saw what had happened, he reproached himself bitterly as the cause of the calamity, and piled a few stones together in the shape of a tomb, as a memorial of his grief. In the mean time, *PANU'N* continued inconsolable at the separation from his beloved wife, and his father seeing that he was determined rather to die than live without her, became apprehensive for his life, and dispatched him in charge of his brothers, to seek *SU'SI'*. When they arrived at the spot in the hills, and were informed by the shepherd of the circumstances attending *SU'SI'S* death, they were overcome with fear and astonishment. *PANU'N*, under pretence of paying his devotions at the tomb of his wife, withdrew from his brothers, when he supplicated the almighty to join him in death with his beloved *SU'SI'*; the earth again opened, and he was swallowed up also. The brothers returned to their father, and reported what had occurred. This is a story well known in *Sindh*, and *MIR MASU'N BAKERIE*, the author of the 2nd *Chach Nameh*, has composed some verses upon it, under the title of *Hassan and Naz**.

3. It is related, that during the reign of a king of *Cutch* named *LAKEH*, there lived a jogí who was wonderfully skilled in the various properties of herbs, and who had for years been occupied in searching for a peculiar kind of grass, the roots of which, if burnt and a man

* NOTE.—There can be little doubt, that this, as well as the succeeding legends, relative to the destruction of the cities *Alor* and *Bráhmañábád*, have their origin in some convulsion of nature.

thrown into the same fire, the body of the person so burnt would become gold. Any of his limbs might afterwards be taken away without the body sustaining any diminution for the parts so taken, would always restore themselves. It happened one day, that this jogí whilst following a flock of goats, observed a red goat eating of the very grass he was so anxious to procure. He immediately rooted it up, and desired the shepherd who was near, to assist him in procuring firewood. When he had collected the wood, and kindled a fire, into which the grass was thrown, the jogí, wishing to make the shepherd the victim of his avarice, under pretence of its being necessary, desired him to make a few circuits round the fire. The man however suspecting foul play, was beforehand with him, and watching an opportunity, seized the jogí himself, and threw him into the fire where he left him to be consumed. The next day when he returned to the spot, great was his astonishment at beholding the golden figure of a man lying amongst the dying embers. He immediately chopped off one of the limbs, and hid it. The next day, he returned to take some more, when he found to his surprise, that another limb had replaced the one he had taken off. In short, in this way the shepherd soon became wealthy, and afterwards revealed the secret of his riches to the king LAKEH, who by the same means, accumulated so much gold, that every day, he was in the habit of giving 1,25,000 rupees, in alms to fakirs.

The country of Cutch taken possession of by the men of Sammáh.

Many of the men of *Sammáh* emigrated to *Cutch*, the ruler of which country treated them with kindness and consideration. After some time they represented that they had become a powerful and numerous tribe, able to support themselves without burthening the state, for which purpose they petitioned the government for a grant of land, which they pledged themselves to cultivate, and pay tribute and tax, like the other subjects of the country. The king of *Cutch* with great generosity, bestowed broad lands upon them, and also gave them 500 carts laden with grain, which they promised to repay with the produce of their agriculture. In the course of time, these people made themselves acquainted with the affairs of the country, and became ambitious to possess it. With this intent they formed a plot in the first instance to seize the capital, and residence of the king, which was as follows; they concealed armed men in their 500 carts, covering them over with grass, two men in each cart, and one as a driver. Under pretence of selling the grass, they were about to enter the fort, but seated in the porch of the gate, was a brahman, an astrologer, whose business it was to divine the intentions of all who entered the city, and who warned the door-keepers

of danger by telling them, he was sure flesh was concealed under the grass. These men would not believe him, but to prove the truth of his assertion, thrust their spears amongst the bundles of grass in the foremost carts. The *Summáhs* who were thus wounded, wiped the stain of the blood to prevent detection; the door-keepers were deceived, the brahman was taunted as a false diviner, and the whole of the carts passed into the city. In the night, the *Summáhs* left their places of concealment, and took possession of the place, and of the whole country, the descendants of the *Summáhs*, are governors of *Cutch* to this day*.

Downfall of the Cities of Alor and Bráhmanábád.

DILU' RÁI was a tyrant, and his oppression and injustice caused the downfall of the cities of *Alor* and *Bráhmanábád*: as they are extraordinary circumstances, I will relate them. It was the practice with that monster of cruelty, to deprive every merchant who visited his city of half his property, and to seize by force the beautiful wives of his subjects, who were made to minister to his sensual gratifications. It happened that a very wealthy merchant by name, SIEF UL MULK, (some say, he was not a merchant, but a prince in disguise,) halted at *Alor* on his road to *Mecca*; he was also accompanied by his wife, a very beautiful woman: in those days, the waters of the river *Mehrán*, ran close by the city of *Alor*. Now when DILU' RÁI, heard of the riches of SIEF UL MULK, and of the beauty of his wife, he determined

* The city of *Goontree* or *Goatree*, one of the three remarkable ruins in *Cutch* and which the writer of this has visited, was the scene of this stratagem; as the strong current in this province agrees so nearly with what our author has written, it is herewith given in the words of Captain BURNES, whose paper on these and other subjects connected with *Cutch*, leave but little employment for the pens of others.

After describing the situation of the city, and the discord which exists amongst its inhabitants, the account says, "Discord having been once sown amongst them, their city fell into the hands of a body of *Sumas* or *Jhurejas* through treachery. This tribe had migrated from *Kacho* in *Sindh* to *Cutch*, and tended herds of cattle in the neighbourhood of *Goontree*, supplied the city with grass, &c. and being encouraged by the differences among the Rajpoots, they secretly introduced armed men into the city, not exactly in the bowels of the wooden horse, but concealed during night in carts among the grass, and thus possessing themselves of *Goontree*, as the Greeks did of *Troy*, they forced the *Sands* to flee from *Cutch*, and they settled in *Bal* beyond *Lemree* in *Jhalawar*, where their posterity are said still to exist.

"It is in the mouth of every one, that the inhabitants of *Kattyindr* are from *Cutch*, which gives probability at least to this story.

"The chiefs of the tribe of *Suma*, which thus came into power, were *MOR* and *MUNAI* names of notoriety to this day, and often mentioned by the *Bhats* of the country in their songs; and it was the son of this *MOR*, who afterwards took *Kúncot* in *Wágur*, and extended his rule over all *Cutch*, and converted the province into a petty kingdom in which it has ever since continued."

to rob him of both, and told him of his intention. The unfortunate merchant, petitioned for three days' grace, when he promised to accede to the tyrant's wishes in all things. SIEF UL MULK was a holy man, and that night prayed fervently to God and the prophet to assist him in his difficulties; he had a dream, wherein he was desired to collect together all the masons of the city of *Alor*, and cut a road through the neighbouring hills, sufficiently large to allow of the passage of a boat, by which means he should escape. The merchant reasoned within himself, that such could not possibly be the work of mortal hands, but since it was the will of the most high, he did as he was directed, and in one night the passage was completed; the river changed its course, and flowing through the new channel, enabled SIEF UL MULK, to escape with his wife and property, from the fangs of the tyrant DILU' RA'I. The river has ever since flowed in the new channel, and from its so doing, may be dated the downfall of the city of *Alor*, which rapidly fell into decay, and from being the capital city of the country, soon became a mere ruin. It is related, that SEIF UL MULK with his wife returned from *Mecca*, and took up his residence near *Sitaporu*, where he died after having two sons; his tomb, and those of his sons, are well known as places of pilgrimage.

Destruction of Bráhmañábád.

After the river had left the city of *Alor*, DILU' RA'I took up his residence at *Eráhmañábád*; he had a brother named ЧОТАН, who by the blessing of God had early in life embraced Islamism, and knew the Korán by heart; his friends importuned him to marry, but he shewed a disinclination to do so, till one of them tauntingly observed; "Oh, he does not intend to marry a native of his own country, but will go to *Mecca*, and take unto himself the daughter of some wealthy Arab. Now it so happened, that ЧОТАН at that time contemplated a journey to the holy city; this speech, and the importunity of his friends urged him to the measure, and he departed. During his residence at *Mecca*, as he was one day walking in the street, he observed a woman standing at the door of a house reading the korán aloud. ЧОТАН stopped to listen to her, whereupon she asked him, why he did so? he said, "He also was anxious to read the korán, and that he would consider himself her slave, if she would instruct him. The woman replied, My teacher is the daughter of such a person, if you will disguise yourself as a woman and accompany me, I will introduce you to her." They went accordingly, and in his disguise, ЧОТАН attended daily upon his instructress, who in addition to other accomplishments, was also skilled in astrology. On one occasion ЧОТАН remarked to her, "You who are so well skilled in fore-

telling the destinies of others, are you acquainted with your own?" She said "Yes; and it is foretold that I shall become the wife of a native of *Sindh*, and you are the man." CHOTAH, finding his secret revealed, no longer continued his stolen visits, but making the girl's parents acquainted with his passion, was lawfully married to her, and returned to *Bráhmánábád*, where he employed himself in trying to persuade DILU' RAI, to abandon his evil courses, but without effect. The beauty of CHOTAH'S wife (FATIMEH), reaching the ears of the tyrant, he determined to possess her and for this purpose sought an opportunity whilst his brother was from home to visit his wife. CHOTAH being informed of this, returned quickly and taking FATIMEH with him departed from the city, after venting maledictions upon it, and the tyrant who ruled there, prophecying that the place, and all who inhabited it, would be overthrown. Many believed his predictions, and fled; three nights afterwards, it was, with all its inhabitants, swallowed up; one single minaret alone remains as a warning to the rest of mankind.

Worship of Idols.

BIN CA'SIM after the taking of *Alor** entered the city, where he observed a number of people prostrating themselves before a temple. On inquiring, he found that they were worshipping idols; he entered the temple, where he saw the figure of a man on horseback so perfect, that he drew his sword to defend himself, but the bystanders told him to sheathe it again, as the figure he saw was not a man, but the resemblance of one and an object of adoration. Upon this, BIN CA'SIM advanced to the figure, and the better to prove to these people the absurdity of their religion, drew one of the gauntlets† from the hands of the idol, and observing to the idolators that their divinity had now only one gauntlet left, desired them to inquire of him, what had become of the other? to which they replied, "How should the inanimate idol be able to answer a question; what can he understand of such things?" Then said BIN CA'SIM, "what strange sort of god do you worship, who so far from being acquainted with the state of others, is not even able to answer a question concerning his own." The unbelievers were ashamed at the rebuke.

* 93 H. 711 A. D.

† Literally, the word is دستوان *dastwán*, gauntlet or glove, probably more correct as an ornament of some kind, than a glove.

II.—*Examination and Analysis of the Mackenzie Manuscripts deposited in the Madras College library. By the Reverend WILLIAM TAYLOR.*

Palm-leaf MS. No. 217, counter mark 74.

A :—TAMIL

I.—*Cóngá désa Rajákal.*

There are two copies of this valuable manuscript both of which were read and compared together. The one was found to be an imperfect copy of the other, having besides a considerable chasm in the middle: the superior copy has also a short break in the passage relating to a change of VISHNU VERRD'HANA of *Talcád* from the *Jaina* to the *Vaishnava* faith; there is also an omission of one or two names. In other respects the better manuscript is complete. The palm-leaves of this copy (and of the inferior one also) had suffered much from being eaten through by insects: in some places letters, in others words, were quite eaten away: these, however, could be made out by a little attention; and to prevent further illegibility, I directed the manuscript to be re-stored in paper, forming a valuable record.

Though the title indicates only a narrative of the ancient *Cóngá-désam* (being as it would appear the same with the modern *Coimbatore* country) yet the work contains distinct chapters, or sections, which might be regarded as distinct productions on the *Chólu*, *Oyisála* and *Vijayanagara* kingdoms; these kings having been successively conquerors of the *Cóngá* country. The first record of the country goes up nearly to the commencement of the Christian era, and narrates the rule of some chiefs down to the close of the ninth century, and conquest of the country about that time by ADITYA VARMA a *Chólu* prince. Various matters are narrated in connexion with this dynasty, and some light is thrown on the *Pandya-désam*, such as the records of that kingdom would not own. The *Cóngá* country then seems to have come under the rule of the *Oyisálas* whose capital was above the Gháts, in the Mysore country. These gave way before the *Ráyers*, of *Bisnagur*.

Both dynasties of *Oyisálas* and *Ráyers* are given from the commencement. The record is brought down to a period subsequent to the transfer of the remains of the *Ráyer* power to *Pennacóndai*; and concludes with narrating warlike operations in the *Mysore* country, with the siege and storming of *Seringapatam* A. D. 1609-10, nearly two hundred years antecedent to a like event which made it for a time

so famous. At that time it is said to have come into the possession of the rája UDIYAR of Mysore.

The manuscript is for the most part free from the mythological fable which usually disfigures *Hindu* documents, and is well supported by dates; in general referred to inscriptions which are mentioned; and many grants of land are specified with such reference. On the whole this is one of the best, and most valuable manuscripts in the collection. A more full abstract is not here given seeing that sometime since, I translated the whole; and intend to transmit a copy of it to the Bengal Asiatic Society for insertion, if thought worthy by them of such distinction, in the transactions of that illustrious Society.

Professor WILSON's notice of this manuscript will be found in Des. Cat. Vol. I. p. 198.

Books of Manuscripts on paper. Book No. 12, countermark 766.

Section 1.—The universal deluge according to the account of the Jaina people in the Chettupat district.

The account was given by one named CAVUNDE'SVARER. There are some geographical details of the neighbourhood of the *Himálaya* mountains, with chronological definitions dealing in magnificent periods of time, and narrating changes of those periods. Bounds of *Dherma Cándam*, and *Mléch'há Cándam*. The period of great heat—of fire—rain—previous to the deluge; then other kinds of showers—among them of sugarcane juice—of poison—quintessence of poison; by which means the earth sinks down depressed. Then come showers of milk—nectar—water, and afterwards the earth becomes restored: grass, plants, shrubs, &c. re-appear. Men also again inhabit the earth, who dwell on it and increase. After forty thousand years, the *Menus*, and *Chacravertis* are born, and continue to rule. Then comes a period of twenty crores of crores of years, at the close of which the seven kinds of showers, as before, introduce the *yuga praláya*, or periodical deluge. Certain other changes occur down to the year 2480 of the *kali-yuga*, corresponding with the year of the era of *Saliváhana* 1739 (A. D. 1817 when possibly the account was given). After another 18,000 years, there will be extreme heat for 21,000 years, and then in the *Dherma Cándam* only, the fire showers falling, will be followed by the periodical deluge.

Note. This short paper is in Tamil strangely mingled with *Prákrit*; and the writing is so much faded as to be with difficulty legible. It contains the most extravagant exaggerations; but illustrates obscure expressions in other manuscripts, as to fire-showers; and may be

taken generally for a confirmation of opinion among the *Jainas* substantially the same as to the leading fact of the deluge with the opinions and records concerning the same great event by the Brahmanical Hindus.

Section 2.—Account of a Rája of Chenjí (Ginjee) who persecuted the Jaina people.

In the year of *Saliváhana* 1400 (A. D. 1478, 9) CA'VARAI VENCATAPATI NAYAK ruled in *Ginjee*, over the *Tiruvadi* district near *Vridháchala*. Being a man of a low tribe, he demanded of the brahmáns who among them would give one of their daughters to him as a wife. They replied that if the *Jainas* would first give him a wife, they would themselves do the same. The brahmáns went to a famous *Jaina* in the *Dindivanam* district, who promised to give his daughter to the chieftain ; but instead of actually doing so, contrived to offer him a very cutting insult. The chief greatly incensed issued an order to decapitate all the *Jainas* that could be met with. In consequence some *Jainas* emigrated : some adopted the *Saiva* religion ; some were slain, and some dissembled, secretly following their own rites. In *Uppu-Véhir* a disguised *Jaina* was taken at a pool of water while performing his evening ceremonies in the *Jaina* method, and was sent to *Ginjee* ; but as the chief had just then a child born in his house, he pardoned the *Jaina*. This person after so narrow an escape vowed to devote himself to an ascetic life. With some preparatory studies he fulfilled his vow.

Another *Jaina*, through fear, had emigrated towards the south, passing from place to place, till at length in a dream he was directed not to go any further away. Immediately afterwards he heard of the approach of the Muhammadans towards his native place. He went to meet them, and advanced as far as *Arcot* ; where he acquired land to cultivate.

After some time he sent for the before mentioned *Jaina* ascetic ; and to prevent a strange religion being introduced, he located that person on his lands as a teacher and guide. Some time afterwards a brahman named TATTA'CHA'RYAR set up a pillar at *Conjeveram* and challenged any who might think proper to come and dispute with him. Hearing of this circumstance the aforesaid *Jaina* teacher named VIRACHENA ACHA'RYA went thither, and overcame TATTA'CHA'RYAR in polemical dispute, upset the pillar, and returned to *Uppu-Véhir* ; where he fell sick, and died. Subsequently the *Jaina* religion flourished greatly in that neighbourhood, and TAYAMUR UDAIGAR continued to

extend to persons of that persuasion flattering distinctions and privileges.

Note. This paper was more legible than the former one, but in some places difficult to be restored. It seems to contain a plain traditional statement of matters not very remote ; and, in the main, may possibly be depended on. Many *Jainas* live in the neighbourhood of *Arcot*, *Vellore*, and *Conjeveram*.

Section 3.—Account of the Sánc'hya, and other modes of religious credence.

In the early times during the reign of a son of *Bharatu*, the *Muni Capila* performed penitential austerities after the *Jaina* (*Vaishnava*) mode. There is a defective *Prákrít sloca*, or verse. Some notice follows of the foundation of the *Sánc'hya* School by *CAPILA*. Notices of other persons with defective *slocas*. Account of leaders of the *Jaina* system, and of their disputations with the followers of other opinions.

Remark. This paper is in the same handwriting, and mode of composition, as Section 1, but the ink so much faded, as to leave the meaning provokingly unintelligible. The attempt to read it, and by consequence to restore it, has been a failure. The information that, if otherwise might have been obtained from it, we most probably possess from other sources.

Section 4.—Customs and manners of the Jainas in the Chettupat district.

This paper contains two parts, here designated by the letters A. and B.

A. The *Yethi Dherma* and B. the *Srávana Dherma*.

a. The *Yethi Dherma* is of ten kinds.

1. *Ard'hyavam*, to follow the right way, and teach it to others.
2. *Mard'hava*, to behave with reverence to superiors, and carefully to instruct disciples.
3. *Satyam*, invariably to speak the truth.
4. *Sāujam*, mentally to renounce hatred, affection, or passion, and evil desire : and outwardly to act with purity.
5. *Tiyágam*, to renounce all bad conduct.
6. *Cshama*, to bear patiently, like the earth, in time of trouble.
7. *Tapasu*, outward and inward self-mortification.
8. *Brah-mácharyam*, to relinquish all sexual attachment, even in word or thought.
9. *Aginchanam*, to renounce the darkness of error, and to follow the light of truth.
10. *Samyamam*, duly to celebrate all special periods, festivals, or the like.

b. The *Sravana Dherma* is of eleven kinds, 1. *Terisinígen*, one who relinquishes certain unclean kinds of food, with killing, lying, theft, and all anxious cares. 2. *Vritíken*, one who eats not at night, is faith-

ful to his teacher, to his family, and to his religion ; he is self-restrained and keeps silence, and zealously renounces the use of all pleasant vegetables. 3. *Sámáthiken*, is one, who with the foregoing qualifications, renders homage to the Divine Being three times a day, morning, noon, and evening. 4. *Proshápavásen*, one who fasts on certain days, so appointed to be observed. 5. *Sachitan-vrithen*, one who with the foregoing dispositions renounces certain kinds of food. 6. *Ráttiri bakh-ten*, one who observes mortification during the day only. 7. *Bramah-máchárya*, one always occupied in contemplation of God. 8. *Anarampan*, one who quits cultivation, and all other secular occupations. 9. *Aparigrahan*, one who renounces all kinds of earthly gain. 10. *Anu-mati-pinda-vrithen*, one who forbears to eat even that which he had prepared. 11. *Utishta-pinda-vrithen*, one who relinquishes dress, except for mere decency ; he carries a pot, and lives in the wilderness.

B. The *Párva-carman* and *Apara-carman*.

a. The *Párva-carman* is of 16 kinds ; and relates to ceremonies preceding birth, attendant on it, or consequent thereto ; with any particular ceremonies attendant on special occasions, during life.

b. The *Apara-carman* is of 12 kinds, and relates to ceremonies consequent on death ; the first being burning the body, and the others different rites appropriated to following days. The names only are given, without any explanation of the various ceremonies.

Note. Section 4, A is in the *Granthá-Sanskrit* character, with a little *Jaina-Tamil*, towards the close. B is *Jaina-Tamil*. Though not very legible yet the restoration has been effected, this section may have its use.

Remark. In the *Srávana Dherma* particularly, some resemblance appears to some peculiar and known tenets of the Pythagorean philosophy. PYTHAGORAS is considered to have learned his system from the gymnosophists of India, usually confounded with the Brachmanes. But the Sanskrit term answering to gymnosophist is *Digambara*, usually understood to have belonged especially to the ancient votaries of *Buddha*, and from it the brahmans of the south coined the corrupt term *Samanár*, to denote the shameless sect of the *Bauddhas* or *Jainas*. I think that the tenets taught by PYTHAGORAS were those of the Indian *Digambaras*, or primitive *Bauddhists* ; and throw out the conjecture as perhaps meriting attention.

Section 5.—Representation of the Jainas of the Chettupat district.

A petition to Colonel MACKENZIE, Surveyor General.

The *Jainá* system was established in the Peninsula from very early

times, and had many fanes, with other buildings for sacred purposes, well endowed. The *Saiva* and *Vaishnava* systems arose in opposition; and the brahmans of those classes, by their learning and magical arts brought over the kings, or other rulers, to their mode of credence; followed up by persecutions of the *Jainas*, their champions in polemical discussion being first overcome by magical means, and afterwards destroyed. Some well-disposed rulers knowing these proceedings protected the *Jainas*, and made allowances to their religious edifices. A *Jaina* king from the north named YEMASITALA, came to the *Daudacávanya* (the great Peninsular forest) and clearing it, brought a large colony of people from the north. But KULO'TTUNGA CHOLA and ADO'NDÁI, took the country; and by the counsel of the brahmans many *Jaina* edifices were appropriated to the *Hindu* system of worship, and other edifices were destroyed. At a subsequent period, the conquerors relenting, five *Jaina* fanes, at places specified, were protected and endowed. VICRAMA CHOLA especially made a free-grant of land to the village of *Chitambúr*; copy of the inscription on stone, recording this grant, having been sent to Colonel MACKENZIE with the petition. About six hundred years ago YEDATA-RAYER, and VISHNUVA-DEVARAYER, gave 1400 pagodas as a free donation: the inscription commemorating this grant remains. About 200 years ago VENCATAPATI-RAYER gave a free donation of 1000 pagodas: copy of the inscription, recording the grant, transmitted. The rulers of the *Carnataka* country gave donations. During the rule of the Muhammadans, as the brahmans were their agents, these, without knowledge of their employers, resumed the whole of the grants, with the exception of only 200 pagodas. Besides IBRAHIM *subadar* fought with RA'YAJI of *Arcot*, and taking possession of the whole very unjustly left only 40 pagodas of the annual endowment. The *Jainas* complained to the nabob (name not specified) who issued an order on the subject, but the messenger bringing the order was seized by the *subadar*, and ill-treated. Terrified by this proceeding the *Jainas* made no more complaint, but committed their cause to God. When the Honorable Company had assumed the country, they removed the distress which the *Jainas* had suffered, and conducted themselves with equity to all. The people generally were restored to their privileges; the *Hindus* were employed and favored, and the *Saiva* and *Vaishnava* fanes protected; but about 160 fanes belonging to the *Jainas* were neglected. The *Chitambúr* fane, being ancient and distinguished, received some little notice, to the extent of 60 pagodas. Considering that the arrangement was made by servants of the Honorable Company, the *Jainas* were afraid to make any complaint. At length "as a child addresses its father" they

took courage to address the Government, pointing out the alleged invidious distinguishing favors, accorded to the *Saivas* and *Vaishnavas* above themselves, who were earlier established in *this* country (the *Tóndamandalam*). “As we (says the petition) do not desire much, we now enclose a list of actually necessary expenses for *Chitambúr* and other fanes.”

Section 6.—Account of the Jaina fanes at Chitambúr in the Chettupat district with list of expenses.

The required expenditure referred to in the preceding article follows here; but as it relates to very trifling items and to the supply of such articles as oil, incense, lights, and the like, it was not thought necessary to copy out this portion, which could be of no general interest.

The following queries came after the list of required expenses; and appear, as far as can be made out, to be inquiries given by Colonel MACKENZIE to his agent named APÁVU: some of the inquiries would seem to have been answered by the foregoing and other papers. 1. From the early times to the present, the statement of kings who ruled, requires to be made, either from written history or from tradition. 2. Regulations of old and down to the present time, with the dates or periods of their authors required: also their countries, towns and eras are wanted. 3. Eight thousand *Munis* were killed at *Madura*. In what particular places, and at what times did this event occur? 4. As the *Jaina* system is asserted to be the original one, at what time and place did it begin? 5. To what place in *Ceylon* were the *Bauddhas* first sent? 6. It is said that the world was destroyed by a flood, and only *Satyavrata* preserved: what do the *Jaina* books mention on that point? 7. What do the *Jainas* say of showers of fire and of mud, destroying the earth? 8. From what country did the *Ládas* and *Lebbis* come? 9. The *Yethi-dherma* and *Grihastha dherma*(the rest illegible).

Section 7.—Account of Damara-pākam in the Arcot district.

In the beginning of the era of *Saliváhana* this country (*Tóndamandalam*) was governed by the *Curumbers*, who built forts; and KULOT-TUNGA-CHOLA hearing that they were bad people, came and conquered the land which he gave to his posterity. After some time, in the days of VIRA-JAMBU-RAYER, one named VIRA-VASANTA-RAYER acquired authority in this mud fort and changed the name to *Vira-vasanta-puram*, building temples, which after some time decayed, together with his authority. In the time of ACHYUTA-RAYER (of *Bisnagar*) an investigation was made by him, who had a car made and a fane built to *Varada-raja*, with other similar matters. In the time of ZULFECAR

KHÁN the country went to ruin. In the time of the nabob WALLAJAH this mud-fort was attended to: a *killadar* and a revenue court were fixed there. In the great disturbance, many people from the vicinity took refuge within it. The fort is fifteen cawnies in extent. Here follows a list of the fanes or temples, which are around it, together with sacred pools and porches.

Section 8.—Account of ARZAKIYACHENAN and ANJÁTACANDAN, who ruled in the old fort of Azilam in the Arcot district.

Anciently all this surrounding country was waste. The above-mentioned persons came from the north, and built forts on the hills named *Cuthirái-tóndi*, and *Vaiyáli-tóndi*, with a town named *Arzagu-chenai*, having a palace therein, with a surrounding wall and gates: they also formed a lower fort, and an upper citadel. These chiefs extended their authority to some distance around, strengthened by fortified posts; and being without fear of superiors they began to molest the common people. Matters being thus, about three hundred years ago "*our forefathers*" came from the district of *Sri-sailam* in the north, to this country; from what cause is not known. By the permission of YOMMUNAR who built the fort of *Vellore*, they resided under his authority, and constructed a small military fort, becoming a check on the before-mentioned marauding chieftains. They formed five villages into one district, and protected the people. From that time, downwards, whether they held the land by *Sarvamántyam* (independent right) or by *Artamánium* (half right) we do not know. Subsequently from the time of SABBULLA KHÁN, they were accustomed to pay a small and easy tribute. From the time of RÁYAJI's *Subah* that easy taxation ceased, and a regular tribute to the full extent was paid. In the time of the nabob in consequence of the molestation of one named SILA-NAYAKEN (supposed to be some predatory chief) we built a small fort of brick for protection, and gave a maintenance to the troops that kept it from the proceeds of the land.

After the assumption of the country by the Honorable Company that allowance was discontinued, and the fort now only remains. We continue to cultivate the ground, and pay tribute to the Company like others; sometimes by direct tax to Government, and sometimes by an intermediate lease to farmers. There are two old fanes, one *Saiva*, one *Vaishnava*, in the neighbourhood. Some other unimportant details of fanes, sacred pools, &c. at the close of the document.

Remark. Compared with other papers the opening portion of this section may throw a ray of light additional on the state of the Carnatic under the early Muhammadan, or else the *Vijayanágara* government.

The narrative implies its having been written down from the oral communication of villagers, apparently of the *Vellâla*, or agricultural class : claiming by tradition a descent from persons who emigrated hither from *Sri-sâilam* in the north.

Section 9.—An account of Pundî, a Jaina fane in the Arnee district.

This is a shrine of *Arhat* of the *Jainas*, of great consequence. The paper commences with a poetical description of the paradise in the midst of which it was built. The occasion was the following :—Two *Védars*, (of the tribe of wild-hunters,) one named *IRUMBAN*, the other *PUNDAN*, came thither, in order to dig up an edible kind of root. There was an ascetic who like *VALMICA* was doing penance in a white ant-hill, when these hunters in digging struck him on the breast with their implement. The hunters afraid shaded the spot with branches, and daily brought to the ascetic, who was named *TEKU-MANI-NÁTHAR*, offerings of honey, flour, fruits, and roots. After doing so for a long time, another *Muni* came thither, named *SAMAYA-NÁTHAR*, on seeing whom the *VÉDARS* became almost lifeless through dread ; but on his manifesting tokens of favor they recovered self-possession. The *Védars* said to him “ There is a god like to yourself in our quarter.” The *Muni* being rejoiced bid them shew him where, which they speedily did with great reverence. Under his instructions the foundations of a shrine to *ARHAT* were laid with the prescribed ceremonies. The two *Védars* afterwards hastily ran away, taking with them their bows and arrows to the *Rayer* to whom they reported that they brought good news which would remove his troubles. On the *Rayer* inquiring what it was, *PUNDAN* reminded him of a promise from him of giving even to the extent of half his dominions, if an evil spirit which possessed his sister, and which had destroyed all who attempted to exorcise it, could be cast out. While the man was speaking, this spirit quitted the woman, who came forth dressed, a plate of flowers in her hand, with which she set out to visit the residence of the *Muni* whose power had cured her. The *Rayer* and his family followed after, and on coming to the place, they all paid homage to the sage. On the *Rayer* asking him what he demanded, he required that the begun temple should be properly finished : which the *Rayer* accordingly directed to be accomplished. The two *Védars* had villages given them which afterwards bore their respective names ; and when one of the *Munis* died, the other continued to reside in or near the shrine.

Note. This paper from the fading of the ink, caused great trouble in restoring particular passages, with a few failures in making out some

words, and letters. The general sense is however, preserved. It is in poetical Tamil, of the plainer sort, and merely the legend of a *Jaina* fane. The *Rayer's* name is not mentioned, nor any date. Accordingly the only use of the document is to illustrate native manners, and the mode of the introduction of the *Jaina* system at a remote period. The tribe of *Védurs* (a pure Tamil word having no connexion with the Sanskrit word *Véda*) were not Hindus; but, according to indications in these papers, they were the earliest inhabitants of the peninsula, giving way before the *Curumbars*, even as these also were superseded by the pure Hindus. In *Hindu* writings the term *Védar* is synonymous with every thing low, vile and contemptible under a human form.

Section 10.—An account of a hillock of white pebbles (fossil remains) at Callipiliyúr in the district of Chettupat.

To the east of the above village there is a hillock entirely of white stones. The hierophant of the fane in that village, gave the following account of them. Two *rácshasas* named VÁTHEN and VIL-VÁTHEN lived here, and were accustomed to feast foot-travellers in the following manner: VIL-VÁTHEN first slew his younger brother VÁTHEN and then cooked him in pots out of which he fed the traveller. The meal being finished VIL-VÁTHEN called on his brother by name, who came forth alive, rending the bowels of the guest, who dying in consequence both of the savages feasted on his body. On the occasion of the marriage of SIVU and PARVATI, at *Cailása*, they dismissed AGASTYA, sending him to the mountain *Pothaiya* in the south; who, on the road, came by the residence of these *rácshasas*, and was treated with great civility by VIL-VÁTHEN, and the usual meal. On its being finished VIL-VÁTHEN called his brother; and AGASTYA, penetrating the state of the case, took up the words and added a word or two of Sanskrit, in consequence of which *mantra* the body of VÁTHEN dissolved, and passed away, without doing AGASTYA any mischief. He denounced a woe on VIL-VÁTHEN who died. The bones of these two *rácshasas* having fallen to pieces, and becoming petrified, are now termed white pebbles.

Remark. Setting aside the ridiculous fable, a tradition like this implies that the Hindus designate savages by the term *rácshasas*; and that possibly (as Dr. LEYDEN has intimated) cannibalism was common in *India*, among the tribes supplanted by *Brahmanism* or *Bauddhism*. The hillock itself if really a fossil petrification should be an object of attention to the naturalist.

Section 11.—Account of the fane of Tiruvapádi and of the ancient fort of Adi-narrayen Sambhuva Rayer at Váyalar in the Chettupat district.

In the ancient times PARASARA-RISHI (father of VYÁSA,) and MÁR-CANDAYA-RISHI, retired for penance to this mountain named *Sridarisanam*. VISHNU came thither to see them, and remained reposing on ATHI-SESHA; giving *mócsham* (or eternal happiness), to such as came to worship him there: these visitors being not men, but the inferior gods. They formed mountain-pools for bathing, which now make five cascades. The *tirthas* (or pools), are designated by names. In one of them the footsteps of VISHNU are visible by the marks left. A little to the east of this hill VIRA NARRAYANA SAMBHUVA RAYEN built a fort, governed the country, and made some charitable grants. Fragments of buildings in brick-work indicate the site of this fort. His palace was on a hill at some distance westward; where also vestiges appear. There is also a Vaishnava fane. As only a few dwellings are in that place it is now called *Vayalúr* (a hamlet in the open fields). At the foot of the hill there was once a Saiva fane, of which now only the emblem of SIVA remains. Under the hill are other antique vestiges, among them of a wide street with *mantapas* (or porches), and other similar things, appendages to Hindu worship. In a former *yugu* (or age) the *Vánara* (sylvens) paid homage to RÁMA, the incarnation of VISHNU; and when the latter returned to *Váicontha*, he called for them: some followed him, and some remained, continuing to the present day, in Vaishnava fanes, to attend on the god. The black-faced species of ape especially abounds in this district.

This statement was written according to the account given by the NAMHIÁN (brahman) of *Tiruvayipadi*, and of *Vencatésa-mutháliar*.

Remark. From an account like this we can extract nothing more than the certainty of some head town of a district, having existed under a chief, whose name elsewhere appears, and who may have been among the chiefs arising out of the ruins of the ancient *Chóla* dynasty.

Section 12.—An inscription on a slab at the entrance of a Jaina fane at Turakal in the district of Vandivási.

The inscription commemorates the grant by TIRUMUCAPA SVASTA SRI GOVA-PERUN-SINGHEN, of a *Pallichantam* (alms-house), to the officiating hierophants and their assistants. It has no date except the specification of *Carteceya* month (part of November). It is in Tamil mingled with Prákrit in the usual *Jaina* manner; and does not appear to be complete, unless the sign at the end be intended to denote (&c.)

by the copyist, as not having transcribed the whole, which seems to be not improbable.

A remark by APPAVU (Col. MACKENZIE's Servant.)

In *Turákal* there is a small hill, on which there is a curious *Jaina* fane, and another one at the base. In one place there is an image of fine workmanship, and in another place four well sculptured images. In the latter there are three inscriptions, respectively in the *Canarese*, *Tamil*, and *Sanskrit*, of which the letters would require great pains to copy, or decipher. There is the unfinished commencement of a sculptured cave, like those at *Mávalipuram*, and several natural caves around the hill; in three of which there are *Jaina* images, on seats (or pedestals): they say that *Jaina* ascetics lived in these caves. There was most probably a *Jaina subah* (or assembly) here in former times. The description and account were obtained from LOGA-NÁTHA-NÁYANAR.

Section 13.—An account of Aragiri hill, near the village of Arun-gunram in the Arcot district.

In the *Scánda-purána* by VEDA-VYASA, an account is given of a place three and a half *yojanas* (leagues of 10 miles each) west of *Conjeveram*; where there was a celebrated fane endowed by many *rájas*, as KULOTTUNGA CHOLA, and others. Notice of festivals in the neighbourhood. In the fanes of *Tirtha-náthar*, and *Cudapa-náthar*, are inscriptions of the year 1120 era of *Saliváhana*. On a large stone there is an inscription of the time of KULOTTUNGA CHOLA commemorating a treaty between JAMBU-RAYEN who ruled in west country, the conqueror of the PANDIYA king, and *rája* CESARI VARMA. There are besides many other inscriptions, commemorating grants by other persons. The Muhammadans broke up this fane, and used the materials in building *Arcot*. In the shrine of one of the emblems of SIVA, to the north-east some offerings continue to be paid. There is a perpetual spring (fountain) near the place. In the era of *Saliváhana* 1122, one, named CHENGENI VICRAMA RAYER JAMBU-RAYEN, built a fane to the (*gráma devítí*) village tutelary goddess: an inscription on a pillar of the porch is the attestation. Various benefactors built and endowed particular places, and after their time a chieftain named ANJATHI CAUDAN acquired authority and fixed boundary gates at a great distance around. At that time *Vellore*, *Arcot*, and *Arnee* (forts) were not built: when these were constructed that chieftain's power had passed away. To the paper is appended a list of ten sacred pools, and two larger reservoirs.

Observation. The foregoing paper seems to afford some historical indications ; and the neighbourhood therein referred to would seem to abound in remains of some antiquity. Should the inscriptions not prove to be found among those in the collection, from the *Conjeeveram* district, they would perhaps merit an attentive examination. We find herein a confirmation of Section 11, and that JAMBU RAYER (or SAMBHUVA RAYER) was probably the titular name of some series of *rájas*, or important chieftains.

Note. From Section 10 to 13 the handwriting differs, and with a few exceptions, is legible, not causing much difficulty, these sections have been satisfactorily restored, though in a very few years more the ink would have entirely faded.

(A paper not sectionized in the list at the head of the Book No. 12.)

*Account of the Vellore Muhammadan Chiefs, composed by VELLI
CANDAIYAR.*

In the course of the *Calí-yuga*, GHULAM ALI KHÁN ruled in *Vellore*. He had four sons. The names of these are mentioned, and their rule. ACBAR MUHAMMAD ALI was the youngest, and most distinguished. In his time one named SILA NAYAKEN made great disturbance in the country. A force was sent against him of which the marchings and halts are stated. On coming to the boundary of SILA NAYAKEN, spies were sent, who after having ascended the hill-fort of SILA NAYAKEN returned, and reported that they had seen only women. As many of these as should be taken were ordered to be sent to *Arcot* ; and one named RANGAPA CHETTI, advised to have their hands and feet cut off, which it is implied was done. Mention is made of a lame *Pundit*, who supplied SÁDAT ULLA KHÁN with ten lakhs of money. The cause of the above hostile movement is stated to have originated in a disagreement between SILA NAYAKEN, and one named VARADAIYAR ; who had been accustomed mutually to accommodate each other with loans to the extent of 30,000 pieces of money. But on one occasion the loan of only 4,000 was refused to SILA NAYAKEN. In resentment SILA NAYAKEN waylaid the pregnant daughter of VARADAIYAR, and after seizing her, had her bowels ripped open, the fœtus taken out and its place supplied with thorns ; the abdomen being afterwards sewed up. VARADAIYAR went to *Arcot* ; and, by Muhammadan aid, effected the destruction of his cruel neighbour.

Observation. Exclusive of the above, there is some absurd matter as to the derivation of the name of the *Palár* (or milk-river) and of the *Shadaranya* ; which will be found to be better given elsewhere

in these papers. There is also a very loose paragraph of no weight, as to what the writer had heard of the *Mahrattas*, and Muhammadans, in the Peninsula. It states that the *Rayer* ruled 500 years before the Muhammadans, the *Vellulas* for 700 years before the *Rayer*. Three hundred years preceding are not filled up with any name; and antecedently to that period the *Séra*, *Chola*, *Pándiya* kings, and the *Chacra-vertis* ruled.

This is not a well written paper. Its only use seems to be to explain who was *SILA NAYAKEN* before referred to (Section 8); and to shew how ruthless human nature can sometimes be, under particular circumstances.

Section 14.—Account of Tirupanang Kádu in the district of Tiruvatur.

Reference to the marriage of *SIVA* and *PARVATI*, on *Cailúsa*. The assembly of *rishis*, and others, among them *AGASTYA* and *PULASTHYA*; at which time the earth was irregular in height, and *AGASTYA* received an order to go and make the earth equal, or level. A promise, that *SIVA* would appear to him by the way, was accomplished at this place, called *Tirupanang Kádu*, as being situated in the *Daud-cárunya*, abounding with *Pauna* (i. e. palmyra) trees. At a subsequent period three celebrated poets named *SUNTARER*, *APPAR*, and *SAMPAUTAR* came to *Tiruvatúr*, and sung the praises of that place. A little to the south of *Tiruvatúr*, at *Tirupanang Kádu*, the god appeared to them in the guise of an old man—struck the ground with his *súlam*, producing water—and provided food. Subsequently a *Chola* king who had incurred the guilt of killing a brahman came this way, and to remove that guilt, seeing the place without a fane, he built a double shrine for the god and goddess, with the usual accompaniments and grants, recorded by inscriptions. After the *Chola* kings had passed away, one named *TAMALA-VAREE* built a large *mantapa* (porch) in front of the shrine with a mud fort around. Subsequently some district chieftains turned this fortification into a stronghold, and put troops therein. In the time of *ANAVERDHA KHÁN*, nabob of *Arcot*, 500 *Mahrattas* came by treaty and treacherously took the fort, killing *MU'RTI-NAYAKEN* its commander, and rasing it to the ground. The families of people for ten miles round, through fear of the *Mahratta* cavalry, had taken refuge in the fort; many of these the *Mahrattas* killed, while some escaped wounded. The shrine was plundered, and its service ceased. In the time of *Ráyaji* the ruler of *Arcot*, a wealthy man from *Madras* made some endowments. In the great Muhammadan troubles worship

ceased. The brahmans did not succeed in obtaining the patronage of the Hon'ble Company. A brahman made some repairs, with alms collected by him; and the *Cúmbhábishégam* (or transfer of the inherent divinity of the image, into a pot of water), was performed during the process of the repairs.

Section 15.—Account of the tribe of Nohkars in the Tiruvatúr district.

This class of mountebanks arose about the year 214 era of *Saliváhana*. They acquired skill by the assistance of *DEVÍ* (or *Durga*). On one occasion they especially exerted themselves at *Trinomali*, fixing their pole on the top of one of the loftiest turrets of that fane; and going through their feats as though the pole was fixed on the ground. They then, as a body, begged of the spectators to affiliate them into their tribes; which request was refused. At length the tribe of weavers consented to receive and incorporate them into that tribe. Hence they are considered to be the weavers adopted children.

Note. These people have not the appearance of *Hindus*. Perhaps they came to India about the abovementioned period; and they would desire to be naturalized. I have heard another account of their origin. They may add a class to the number of those who, being in this country, are not aboriginally *Hindus*.

III.—*Manuscript Book, No. 15, countermark 769.*

Section 1.—Account of the war of TONDAMAN CHACRAVERTI and VISVAVASU rája.

ADONDAI the son of KULOTTUNGA CHOLA having destroyed the *Curumbars*, and cleared the waste-lands, ruled the country. Its four boundaries are mentioned, and a hyperbolical description is given of its splendor and power. A king from the north named VISVAVASU came with a great army and fought with him for a year, by which much of the country was laid waste, and the whole conquered, ADONDAI fled with some scattered remnants of his forces, and lived for some time on fruits and roots, the spontaneous productions of the earth. While wandering about a temple of golden-colored turrets struck his view: he entered and worshipped ISVARA and ISVARÍ therein; and determined to remain there. After some time he was favored with a vision of the local *numina*, who assured him that his adoration was accepted, and promised him a great army, with the entire recovery of his possessions. As TONDAMAN was afraid of his adversary, this fear was re-proved; and as a sign he was told, that on going to the encounter, he

should find at a certain place the figure of *Nandi* (the bullock vehicle of *SIVA*), which usually looks at the gate of a shrine, turned the other way. A greatly exaggerated description is given of the battles ; which resulted in favor of *ADONDAI*, who at length, with his own hand, cut down *VISVAVASA rája*. This last (in the *Hindu* poetical fashion) is then represented as turning into a celestial form ; and addressing the conquerer, he gives an account of the cause why he was banished from *INDRA*'s presence, to be a king on earth, and to have his form restored by the hand of a votary of *SIVA*. After declaring the right of the conqueror to rule over the land, he went to the invisible world. The victorious *ADONDAI* appointed ministers to assist him, and returning to *Suriti-puri* (the place of the former vision) he made great additions of shrines and ornaments, and caused the public festivals to be conducted with regularity.

Remark. This is only another and more poetical version of an account otherwise mentioned in other papers of the collection. The leading fact, that *ADONDAI* conquered and regulated the *Tondamandalam* is unquestionably historical. The means will be found to exist in the collection of bringing out the connected circumstances in full detail.

Section 2.—Account of Arcot ; derivation of the word ; first and second settlement ; and subsequent history.

The *Brahmánda-purána* is adduced as an authority that *Nandi* (the vehicle of *SIVA*) for some fault was sentenced to become a stone on earth, and accordingly became a mountain, called *Nandi-dúrگا* (*Nundidroog*). *VISHNU* interceded with *SIVA*, on behalf of *Nandi*. *SIVA* ordered *GANGA'* in his hair, to fall on the fountain, (the river *Polár* rises from *Nundidroog*) and to wash away the fault of *Nandi*. *GANGA'* replied that if she descended on earth she wished *SIVA* and *VISHNU* to be in their shrines on the banks of the river, and that she might run between both to the sea. The request was conceded, and *SIVA* came to *Cánchipúram* (*Conjeveram*) in the shape of a *brahman*. An account of the images of *SIVA* ; and of the six *rishis* who established them. The waste country wherein these six ascetics dwelt was termed *Shadáranya* (in Tamil *Aru-Cádu*) " six wildernesses ;" whence came the word, popularly written and pronounced, *Arcot*.

When *KULOTTUNGA CHOLA*, and his illegitimate son *ADONDAI* had conquered the foresters of the country, they saw that this *Shodáranya* had been the abode of sacred ascetics ; and hence they built many fanes with the usual accompaniments at *Cánchipuram* and other places.

Subsequently the edifices built by them went to ruin; and the country became a wilderness, as it had been before. Thus it remained for some time till NALA BOMMA-NÁYADU, and TIMMA-NÁYADU, being on a hunting excursion from *Pennacondai*, hearing there was a multitude of beasts in this forest, came hither. They saw an old hare chase a fierce tiger and seize it by the throat, at which they were surprised: they considered this to be an auspicious place; and, having caused it to be colonized, they cut down the forest termed *Arcádu*, and built there a stone fort, with treasure discovered by *Anjanam*, (a kind of magic,) and ruling there the power descended to several generations. At length ZULFECAR KHA'N, with a Muhammadan force, came into the country, and, after fighting with the *rája* of *Ginjee* for twelve years, he took the hill-fort of *Ginjee*, and placed DAU'D KHÁN in this country as his subadar. *Ginjee* and other places were included in the district of *Arcot*, and the subah of *Arcot* thenceforward became famous. DAU'D KHÁN after regulating all things went to the north. ZULFECAR KHA'N colonized the country with Muhammadans, and greatly improved it. He was superior to the former *Carnátaca* *rája*, and he made some benefactions to Hindu fanes. From the constant increase of inhabitants the town became very large. During this Muhammadan rule, it was not allowed to the Hindus to build large houses, or to travel in any conveyance. If any such thing appeared the persons connected therewith were seized, fined, and reduced to poverty. Such being the case with the settled residents, the persons employed as servants, were six months on fatigue duty, with a bundle of rice in their hands, and another six with their hands tied together in fetters. At length when the English came into power, and the disturbances had ceased, as *Arcot* was a large town it received much attention; and the inhabitants were happily released from their troubles.

Remark. The former part of this section is merely of etymological consequence, but the latter portion, as to the founding of *Arcot*, is valuable, and is capable of being joined in its proper place, with the other portions of real history to be gathered, here and there, from the materials which form this collection.

Section 3.—Account of the Bauddha rajas who ruled in the seven-walled Fort of Arzipadai tángi.

Anciently the *Bauddhas* ruled over one-third of the country forming the *Dáudacáranya*. They built a large fort with seven walls, called as above. There were *Bauddhist* fanes of celebrity at various places among them at *Conjeveram*. The last of their rulers was YEMASITHALAN. Many persons came to them from a great distance in the north

teaching their doctrinal and polemical *sastras*. They became very accomplished in their religious ways. They were united among themselves, and sent their children to a great distance to receive instruction.

Two persons named ACALANGAN and NISHCALANGAN produced a persecution by privately writing in a *Bauddha* book that the *Jaina* system was the best one. A device was had recourse to in order to discover the authors; and, on being discovered, they were forced to flee for their life, hotly pursued; when NISHCALANGAN, by sacrificing his life, contrived to allow ACALANGAN to escape, charging him, on succeeding to spread their system. The *Bauddhas*, in the heat of the moment had tied a piece of flesh in all the *Jaina* fanes, with a *śloca* of contemptuous import. ACALANGAN after his escape put a vessel containing ordure in the *Bauddha* fanes, with another *śloca* in retaliation. Under these circumstances of discord, the *rāja* ordered an assembly of *Bauddha*, and *Jaina*, learned men to dispute with each other, and to finish within a specified time, when he would himself embrace the victorious system, and put all of the opposite party to death by grinding them in oil-mills. The *Bauddhas* concealed themselves behind a thin cloth enclosure, so as to see their opponents without themselves being seen, and managed the discussion by means of doing homage to an evil goddess: as the appointed term approached the *Jainas* became anxious for their lives. In this extremity ACALANGAN had recourse to a goddess named SVĀLA-DEVĪ, who appeared to him, and gave him a phrase to use, which would mean, "what more?" or "what is there behind?" bidding him kick with his foot behind the veil or curtain. On the morrow ACALANGAN inquired "what more?" or "what is there behind?" and at the same time by kicking at the curtain, he broke a large jar in which the fermented juice of the palm-tree had been kept, wherein from long standing there were worms, and whence an offensive smell proceeded. The king in consequence declared the *Bauddhas* to be conquered, to which they were compelled to accede. ACALANGAN was afterwards admitted to the *rāja's* presence, and became his instructor.—There is a reference to further matter on the subject contained in book No. 27.

Remark. Under restriction as to that reference, it may be observed that from this section the *Bauddhas* and *Jainas* clearly appear to have lived together as people of one religion under two modifications; the *Jainas* gradually increasing by coming from the north, and that a casual dispute only led to the violence of a schism. The account is an *ex-parte* one from the *Jainas*, who seem to have supplanted the *Bauddhas*. The statement that these last had a fane at *Conjeveram* is consistent with vestiges found there, and elucidates a part of the *Madura Sthalla-pu-*

rána, while it affords an idea as to the *time*; checking the extravagance of that *Purána*. Supposing the statement received from the *Jainas* to be with them a matter of record, or correct tradition, we may conclude with certainty that incidents in the *Madura Purána*, carried up to a high antiquity, were not more remote than the early part of the Christian era. In this way, I conceive, documents which seem to be trifling in themselves may, by comparison with other documents, assist in elucidating points of actual history. The *Brahmans* and the *Bauddhas* or *Jainas*, are the best possible checks on each other. The punishment by grinding to death in oil-mills, is one well known to Indian History; and in the progress of development of these papers it will be seen that *Bauddhas* and *Jainas* were subjected to it, at a later period, by *Hindu* kings, under *Brahmanical* influence.

Section 4.—Account of the destruction of Eight Thousand Jainas by the famous SAUMPAÚTAR-MURTI, at Punai-takai-matam.

This is an account considerably *ornamented*; and much resembling the accounts which we otherwise have of the destruction of the *Samunat* at *Madura*; herein also referred to. The site of the transaction is however different, the name of the king who is concerned is not mentioned nor yet the name of his kingdom. I am doubtful whether the transaction be not the same with that which occurred at *Madura*. At all events the paper is worth translating, as a note, or illustration, to any leading view of the whole subject. The general fact that *SAMPAUTAR* was the inciter of an extensive and cruel persecution of the *Bauddhas* or *Jainas*, by the *Saivas*, is historical.

Section 5.—Account of the first founder of the Chola kingdom, named TÁYAMÁN-NALLI.

Anciently the *Pándiya*, *Chóla*, and *Tónda* countries were one vast forest, called after *DAUDACA* a *rácshasa* that dwelt in it. *RÁMA* brought several people from the north, and one person, named *TÁYAMAN-NALLI* settled at *Trichinopoly*; then surrounded by a vast wilderness. He built a fane and placed an emblem of *SIVA*, called after his own name, on the rock: he also paid great attention to cultivation. He had a son called *VEN-CHOLAN*, from connecting the *Cauvery* river with the *Vennar*, and thereby fertilizing an enlarged extent of country. His son was *CARI-CAUDA-CHÓLA* so called from having embanked the *Cauvery* river.

Remark. Of the accuracy of this paper I have some doubts, chiefly because the name of the fane on the top of the rock of *Trichinopoly* is said to be an epithet of *SIVA* of the same import, in *Tamíl*, with *Mátri-*

b'huvesvara in Sanskrit; that is "SIVA who became a mother," from a fable that SIVA gave suck to an orphan; being no doubt some historical circumstance, veiled under an emblem, or hieroglyphic. The name was also borne by a famous *udwita* poet at *Trichinopoly*. Whether it belonged to a colonist from the north, as stated in this paper, I would leave others to determine.

General Note to Manuscript Book, No. 15.

The paper on which this book is written remains in good preservation, unattacked by insects. But the writing being very pale, and liable to early illegibility, pointed it out for restoration. The contents of the book are of average interest, and a few passages are rather special.

IV.—*Carnātaca rājakaḷ Savistāra Charitra, or a General history of the Peninsula.*

(*Palm-leaf Manuscript, No. 214, countermark 75.*)

This work, which is of no ordinary interest or importance, professes to be a general history of Peninsula India, Muhammadan as well as Hindu, and to include the period from the commencement of the *Cali-yuga*, corresponding with the installation of PARICSHĪTA son of ABIMANYA, and grandson of ARJUNA, down to *Cali-yuga* 4908, being *Acheya* year of the Hindu cycle, era of *Vicramaditya* 1864. *Salivāhana saka* 1729, (A. D. 1807-8.) It is a great pity that there is a small chasm in one place, and a much larger one in another, though not in the most valuable portions. The general nature of the work may best appear from the following abstract, often little more than a mere index to the contents.

Introduction. The usual invocation. The author's name NARARYANEN of the *Anantakōn* race of *Ginjee*. The book was composed while Lord W. BENTINCK was Governor of *Madras*, at the special request of Colonel WILLIAM MACLEOD then Commissioner at *Arcot*; who desired NARARYANEN to write down a narrative of events in India from the earliest times, as such an account would be very acceptable to Europeans. In consequence of this request NARARYANEN felt great anxiety that his work should be complete and authentic; and, after six months preparatory study, during which he specially procured the aid of learned Muhammadans, and acquired from them all the details of their books and records, he wrote down this compendium of results. He offers the customary apology to authors and critics for any deficiency that may be found in his production.

The Narrative.

The first *Cānda* or section, on primeval matters. A reference to the creation of elementary principles; the *Brahmādam* or mundane egg,

the formation therein of the different orders of beings and things. The greater and lesser periods, or ages, periodical deluge; formation of inferior gods, *asuras*, and men; *Avatáras* of VISHNU; eclipses, how accounted for; fasting at that time peculiar to India; Hindu notions of geography, mention of *Nípál*, *Moghulistán*, *Túrkhistán* and *Hindustán* proper. The birth of CRISHNA about one hundred years before the end of the *Dwápara-yuga*, and his building the town of *Dwáraca*, on the sea-coast, and reigning there. His actions are stated in plain language, divested of the marvellous.

The second *Cánda*, or section, relating to the royal line of *Hastiná-puri*.

The genealogy of the race deduced from *Sóma*. Accounts of the *Pandavas*, and other persons, similar to matters in the *Mahábhárata*, but reduced to simple narrative, by the rejection of hyperbolical metaphors. A long lapse of time given to the later descendants subsequent to JANAMEJEYA. VICRAMADITYA conquered and ended that race. References to SALIVÁHANA and BHO'JA rája, with their successors (of great value if authentic), down to year of the *Cali-yuga* 3700, about which time is fixed the commencement of the *Hegira*; Hindu kings ruled 591 years after that period. The conquest of *Delhi* placed in the reign of PAITHU. Rise of the Muhammadán ascendancy.

The third Cánda or section. Account of the Willaet, or original country of the Muhammadans.

Geographical details and definition of the country north-west of the *Indus*, adapted to aid in fixing the reference of names in *Pauranic* geography; mention of ALEXANDER'S victory over DARIUS; extended notice of ancient *Irán* and *Túrán*; rise of MUHAMMAD in year of *Vicramáditya* 621, era of *Saliváhana* 486; notices of the CALIPHS his successors; a somewhat full account of HASSAN and HÓSSEN; various subordinate matters; *Cersian* invasion of *Multan* and *Lahore*, (by way of *Candahár* and *Cábul*) against RÁMA DEVA king of that part of the country, (*Hegira* 431,) who routed the invaders and drove them back across the *Indus* at *Attock*. Reference to FIRDAUSÎ author of the *Shah Nameh*, the insufficient reward given to him, which he bestowed in charity, and satirised the promise-breaking patron. Invasion of *Delhi* from *Persia* taking tribute; extension of the eruption in the Deccan; plunder of the *Carnátaca* country extending as far as *Seringapatam*. Images of gods taken thence, and carried to the *Pádsháh* at *Delhi*; RAMANUJA was then at *Seringapatam*, and went to the *Pádsháh* at *Delhi*; by making interest through the medium of the *Pádsháh's* daughter he recovered

the sacred images and brought them back ; the *Pádsháh* after making a treaty with the *Delhi* monarch returned to *Irán*. Another invasion in the year of the *Hegira* 622, with subordinate matters.

The 4th Section on Delhi affairs.

In *Hegira* 625, *Sultan* CAIAS DIN *Pádsháh* invaded *Multán* and was defeated. There are many following details of battle and negociations, not well admitting of an abstract. At a later period there is special mention of MIRZA ALA UDDIN GORG, as having conquered BAHARAM SHAH and being seated on the throne of *Delhi*. He sent to demand tribute from the southern kings in *India*, which was not given, and the refusal led to various hostilities. Affairs of *Gujerat* are introduced. FIROZ SHAH is said to have acquired extensive power in *Hindustan*. Other details of more or less importance are given.

The 5th Section. Account of TIMUR.

A shepherd boy named TAYAMU'R, was in the habit of leading out a few sheep belonging to his mother to the forest, wherein one day he met a holy man ; who, in a manner minutely detailed, prophetically announced his future sovereignty, and that he should be the head of a dynasty of twenty-one kings. At 18 years of age TAYAMU'R discovered treasure in a well : relinquishing the care of sheep, he assembled troops and made successful incursions on *Irán*. He overcame various chieftains, and conquered the troops sent against him by the *Pádsháh*, defeated the *Pádsháh* himself and took him prisoner. In *Hegira* 773, TAYAMU'R imposed tribute on *Irán*. He subsequently attacked the kingdom of *Turán*. TAYAMU'R gave to four of his sons, four kingdoms. He invaded *Afghánistán* and overthrew its ruler. Subsequently TAYAMU'R invaded *Hindustan*. He sat down on the *Delhi* throne *Hegira* 801. Minor details. Transactions with the *Shah* of *Roum*. Intending to invade the empire of *China*, he fell sick and died on the way H. 807 : various details of the *Delhi* empire follow. At a later period some notices of *Oudipore* and *Jeypore* are given.

(A small chasm occurs, the palm-leaf, No. 51, being wanting ; it may be recovered, and space is left for it in the restored copy.)

Some details respecting HUMAÏUN SHAH, his recovery of courage after the loss of his kingdom ascribed to a singular reproof unconsciously given to him by a woman, who charitably bestowed a meal on him when he was a fugitive in disguise. ACBAR ; his inquiries into *Hindu* literature, part of it transfused into *Persian*, at an expense to him of three crores of rupees. He died H. 1014. His son JEHANGUIR—in-temperance ; other habits ; attachment and gifts to NOURMAHAL ; notice of the *Bengal* soubah, held by the younger brother of NOURMAHAL,

who abusing his trust was ordered to be beheaded, but escaped by her contrivance. Anecdote of three lime-kilns kept ready by the *Shah* for the death of himself, of NOURMAHAL and her brother, in case of emergency. AURUNGZEBE. The *Mahrattas*; various details; foundation of *Aurangabad* H. 1060. Notices of ADIL SHAH, and the ruler at *Hyderabad*. Magnificent tomb; details of tributaries. AURUNGZEBE's behaviour towards his father and brothers. Affairs of the *Panjab* and of *Gujerat*. Mention introduced of *Anagundi Ginjee*, and other *Carnátaca* countries. *Vellore*, *Ginjee*, *Arnee*, *Tanjore*, governed by him. War with SÁHOJI, chief of the *Mahrattas*. Death of SILOJI rája; crowning of SÁHOJI who ruled in *Sattará*. The *Pádsháh* sent ZULFECAR KHÁN to conquer the *Carnatic*; fought with the *Mahrattas*, took *Ginjee*. Mention of DAU'D SHAH; made *Killadár* of *Ginjee*. ZULFECAR KHÁN returned. The *Mahrattas* attacked him; details of the *Mahrattas*. ARUNGZEBE sent his son ASUPH SHAH to *Bengal*. Arrangement for his sons previous to his death, which took place in H. 1119. Various details concerning his successor. Details relative to some *Amirs* of the palace. Other matters down to H. 1131, when MUHAMMAD SHAH became *Pádsháh*. He sent out a firman to various kings as far as to *Arcot*. Various details inclusive of *Carnatic* affairs down to NADIR SHAH. AHMED SHAH, subsequent matters.

Section 6th.—Concerning the Mahrattas and the Tuluwa country.

The country referred to in this section lies between the *Nerbudda* and *Toomboodra* rivers (the *Nirmathi* and *Túmbúdra*). That land used to give tribute during the *Dwápara-yuga* to the kings of *Hastinápuri*, down to the time of JANAMEJEYA. SALIVÁHANA was born, an illegitimate child of a brahman, at *Múnguipatnan* at, or near to *Ráma-giri* (or *Dowlutabad*). He made extensive conquests even to the *Cauvery* river. He overcame VICRAMÁDITYA, and placed the son of the latter on his throne as a tributary, at *Oujein*. Many other kings ruled for 4000 years.

Transition to the land of *Tuluwa* and the upper *Carnátaca-désam*. A shepherd of the *Curumba* tribe did service to a *rishi*, or ascetic, who discovered to him hidden treasure, with which the shepherd quitting that occupation raised troops, and laid the foundation of *Anacóndai*, and afterwards of *Bijayanagaram*. He was named PRAVADA-DEVA-RÁYER. No mention of intervening matters down to NARASINGA-DEVA-RÁYER, who introduced a new dynasty.

Section 7th.—On the Hassan dynasty of the Deccan kingdom.

This kingdom began with HASSAN a contemporary with RÁMA-DEVA of the foregoing race. He was of humble origin. A brahman saw

him sleeping in the sun, his face shaded by the hood of a cobra-capella, and thence prognosticated his future greatness. At a time when a sovereign was wanted, and an elephant with a wreath of flowers on its trunk was deputed to fix on the proper person, the animal selected HASSAN from a multitude of people, and deposited the wreath on his head. He was in consequence chosen king.....

(In this place some palm leaves of the copy are wanting: how many cannot be determined, as the No. of the page is uniformly reckoned from the beginning of the section. Spare sheets will be left in the binding up of the restored copy, sufficient to allow of the filling in, should the deficient matter be hereafter recovered. There is so close a coincidence between the beginning of the section, and the account given by FERISHTA of the commencement of the kingdom of the *Deccan*, that possibly the whole section may only have been an abridgment of FERISHTA received by the author NARRÁYANEN from Muhammadans at *Arcot*. If so the loss is immaterial; but if otherwise, it is much to be regretted as a check on the mendacious FERISHTA is very desirable.)

Section 8.—Concerning the lower Carnátaca country.

Definitive boundaries of the *Carnatic*. The *Tónda-mandalam*, capital *Conjeveram*. The *Canara* country, capital *Seringapatam*. The *Chólo-mandalam*, capital here said to be *Chenji*, (*Ginjee*.) *Chola-desam* on the *Cauvery*, its capital *Tanjore*. To the south *Pándiya-mandalam*, capital *Madura* with *Trichinopoly*. *Sera-mandalam*, capital *Tiru-nagari*. *Kerala desam*, capital *Ananta-sayanam*. *Telinga-desam*, capital *Kolondai* (*Golconda*).—Revenues of those different kingdoms. The *Kerala*, *Pándiya*, *Chola*, and other *râjas* were tributaries to the royal house of *Hastinapuri*. Some notice of the incarnations of the emblems of *Vishnu* (the *Chank*, *Chakra*, &c.) in the persons of MA'NER, SADUGOPA'RVAR and others. Notice of MÁNICA, VÁSAGER and SAMPNATAR; their polemical contests with the *Samunar* (*Bauddhas* or *Jainas*). Subsequent to that time the *Vaishnava* sect experienced a depreciation, owing to the ascendancy gained by the *Saivas*. Notice of Tamil poets, COMBAN, PUGERENTAN, OTTA-CUTAN. CAMBAN composed his poetical version of the *Ramáyanan* in Sal. Sac. 807. Notice of some *Chola* kings. The *Vaishnava* teacher RAMANUJA flourished Sal. Sac. 939. TRIBHUVANA CHACRAVERTI became *Suntara Paundiya dever*, Fusly 460, VIRA PANDIYA CHOLAN was his son. RAMANUJA lived in his time. (These points and dates considered as the author's testimony are very important as a check on accounts by the *Saivas*.) Notice of the first inroad made by the Muhammadans into the *Carnatic*. Many details concerning

Crimi-canda-cholan; of RAMANUJA and the Muhammadans; CARICARA CHOLAN flourished 570 Fusly. VILLIPUTTURAR, a poet in the *Conga desam*, translated the *Mahábhárata* into *Tamil* verse at the promised reward of five gold *huns* each stanza (of four lines). On his task being finished, the king gave him only five fanams each stanza. Story of NANDI a king of the *Chola* country, his hunt of a pig, which in the end became metamorphosed into a figure of *Vishnu* in the *Varáha-avatára*, a shrine was built on the spot. Origin of *Chenji* (or *Ginjee*). A treasure was discovered by one ANANTAKON a shepherd, who raised troops therewith, and getting aid from other chiefs, established himself as a *rája*, *Ginjee* being his capital; this was Fusly year 600. He cut a canal for irrigation near *Trinomali* which in the course of time having become filled up, was restored by the nabob WALLAJAH, F. 1184. ANANTAKON gave to his tribe the name of *Sammanamánar*. He was succeeded by CRISHNAKON, F. 650. GONERIKON, F. 680, both of them built sacred edifices. His son was GOVINDAKON, Fusly 700. VALLIYAKON, Fusly 720, he made roads, choultries, &c. The dynasty now gave way before a *Curumba* tribe named *Vaduga Yediar* (north country shepherds): the first king of this tribe was KOBE-LINGAN, F. 740. He built a brick fort at *Chentamangalam*. He formed some tanks, and left others unfinished. In his time, his feudatories built several forts with bricks in different places, as *Asupúr*, *Pelácupúr*, *Cupam*, *Cohir*, &c. He formed channels to bring down streams for irrigation from mountain springs; among which the one named *Kobilingan Juvi* remains to this day. He ruled with great equity. Afterwards, F. 800, NARASINGA UDIYAR became viceroy, the Maharayer of *Anacondai*, *Vijayanagaram*, and *Pennacondai* sent an army against the aforesaid KOBILINGAN, and having conquered the country he delivered it over to NARASINGA UDIYAR to be held as a fief sending tribute to the *ráyer*. A donation was made to a fane or temple, Sal. Sac. 1332 (A. D. 1410). About this time the *rája* of *Vandiwash* named BIHUPATI RÁYER UDIYAR ruled according to an inscription dated in Sal. Sac. 1341. VIRA-VIJAYA RAYER was also ruler over that district. VALLÁLA RÁYER ruled, F. 750. He made additions to the shrine at *Trinomali*. He paid tribute to the *ráyer*. After he fell the country being divided among petty chiefs became subject to CRISHNA-DEVA-RAYER. He sent a great army into the *Carnatic*, said to have consisted of 100,000 men, under the command of chiefs named VAIYAPA NAYAKER, TUBÁKI, CRISHNAPA NAYAKER, VIJAYA RÁGHAVA NAYAKER, and VENKITAPA NAYAKER. In F. 870 VANYAPA NAYAKER came and collected tribute extensively. He encamped near *Vellore*. The chief at *Chittoor*, and other petty chiefs

of the *Tondamandalam* had an interview with him. He fixed their rate of tribute. Mention is made among others of *Bomma-reddi* of *Colastri*. The *ráyer's* general afterwards went to *Ginjee*. The chiefs of the *Chola-mandalam* had an interview with him, and their tribute was also settled. VAIYAPA NAYAKER continued at *Ginjee* with his army. He gave it in charge to the subordinate generals to go and levy tribute on the *Pandya*, *Chola*, and *Chera* kingdoms. In *Tanjore*, *Trichinopoly*, *Madura* and *Tiru-nagari*, the kings respectfully answered to the demand. Thus the eastern *Carnátaca* (as distinguished from *Mysore*, &c.) became subject to the *ráyer*. He derived three crores of rupees from this country, and in consequence he divided the whole into three parts, under three viceroys. CRISHNAPA NAYAKER at *Ginjee*, governed the country from *Nellore* to the river *Coleroon*; VIJAYA RAGHAVA at *Tanjore*, governed the fertile country washed by the *Cauvery* river; and to VENKITAPA NAYAKER, was assigned the country south of the latter. Notices follow of the proceedings of these viceroys. A Muhammadan coalition was formed against the *ráyer*. The principal viceroy of the latter was recalled, with his troops; and TUBÁKI NAYAKER thenceforward assumed independency at *Ginjee*. His successors with their dates and proceedings are mentioned. The last of them APPA NAYAKER is described as weak and vicious to an extreme. He came to the throne, F. 1030, and in his time a Muhammadan confederacy, the formation of which is ascribed to the treachery of BÓMMA rája of *Chingleput*, brought down a deluge of Muhammadan troops into the lower *Carnatic*. The siege of *Ginjee*, and its capture, after great resistance are described with considerable force and spirit, and at much length as the author is writing about his native place. The proceedings of VIJAYA RAGHAVA at *Tanjore* are also alluded to: he purchased peace. TIRUMALA NAYAKER of *Madura*, by the assistance of the *Collaries* routed and repelled the Muhammadans, who returned discomfited to *Ginjee*. Irruption of the Mahrattas into the country. Seizure of *Tanjore*. Tribute imposed by them on other places. Proceedings of *Sivaji* in the lower *Carnatic*. Arrival of the English at *Chennapatnam* (*Madras*). Notice of other Europeans. From this time forwards, there is a minute and generally correct detail of the proceedings of the English and French in connexion with the nabob on the one part, and CHUNDA saheb, &c. on the other part. The French capture of *Ginjee* is circumstantially stated. The whole of the connected and subsequent transactions are interwoven with details as to motives on the part of native princes, such as perhaps our English historians, who have gone over the same ground, may not have so fully known. HYDER ALI and TIPPO's pro-

ceedings are fully described; and the commanding interest of the narrative may be considered to close with the final capture of *Seringapatam*, and its celebration at *Madras*. The author, however, continues his narrative onwards a few years later; and closes with a reference to the regulation of the *Arcot* country, and its management by his patron, Colonel W. MACLEOD, as Commissioner.

Remark.—In a general retrospect of the contents of this large manuscript, it appears that the suggestion of an English gentleman, produced that rare result a native Hindu historian, writing under the influence of good sense, and in conformity to a prevailing degree, with European notions of history. In an abstract I have not felt myself obliged to verify or compare his dates and facts with other authorities. There are probably some anachronisms and errors; but the value of the whole seems to me considerable, and the eighth section, down to the arrival of the English, invaluable. To me that matter is new, and with the incidental coincidences derivable from other papers in this collection a narrative may now be carried upwards, with some degree of certainty, to the era of CRISHNA RÁYER; above which there is only a short interval of anarchy till we reach the regular *Chola* government. The whole manuscript, but especially the first half of the eighth Section, ought, I am of opinion, to be carefully translated and edited.

Prof. WILSON's notice of this MS. (Des. Cat. Vol. I. p. 199,) is as follows:—

“XI. *Kemáta-rájakal*, a Palm leaves, *b* ditto, *c* ditto, *d* ditto. An account of the sovereigns of the *Carnatic*. After a short notice of YUDHISHTIRA, and his brethren, and of some Hindu princes of the lunar family, the MS. gives an account of the *Mogul* sovereigns of Hindustan, and the family of NIZAM ALI. MS. *b* is an abridgment.”

On reading this notice I went to the college, and searched for a second copy without succeeding in finding one. This copy is much injured by insects. I shall be gratified if eventually I may succeed in effecting one completely restored copy.

[*To be continued.*]

NOTE. Since the above was set up in type we have received information, that Mr. Taylor's analysis will be printed in the *Madras Journal*. This does not deter us from publication inasmuch as our readers are for the greater part distinct. On the other hand it is most remote from our wishes to be thought guilty of forestalling our brother editor. We have both a claim to the materials, —he from his connection with the place of their deposit—we from having recommended their being entrusted to Mr. Taylor for examination; and we should be thankful to him for the opportunity afforded of making widely known the result of his successful labours.—ED.

III.—*Report on the Caoutchouc Tree of Assam made at the request of Captain JENKINS, Agent to the Governor General. By WILLIAM GRIFFITH, Assistant Surgeon on deputation with the Bhotan Mission.*

[Communicated by the Government.]

Agreeable to your instructions I proceeded to *Ferozepoor*, and thence, accompanied by Lieut. VETCH and Mr. BROWNLOW, to the forests in which the tree yielding the caoutchouc is found.

The forests alluded to, form what is evidently the *Tarái*, and they probably extend almost without intermission, from the western to the eastern extremity of the valley, at least on its northern boundary.

The breadth of the forest tracts is variable ; in the parts we traversed it was computed to be between 7 and 8 miles. The forests are of a decidedly tropical character ; exceptions, however, to this occur towards the basis of the hills, near which some trees indicative of a temperate climate are found, such as horse and spanish chesnuts, an alder, *Hovenia dulcis*. No particularly fine timber trees occurred with the exception of a solitary chaum tree, the *Artocarpus chaplasha* of Dr. ROXBURGH. The caoutchouc tree itself occurs very generally as a solitary tree*, occasionally however two or three may be found grouped together. In size they are far superior to all the other trees, and especially in the extent of surface covered by their branches. They certainly deserve to be ranked amongst the largest known trees, being probably inferior in size to the banian only, which may be said to be capable of indefinite extension ; such is the size indeed of the caoutchouc tree, that it may be distinguished from a distance of several miles by its dense, immense, and lofty crown. The dimensions of one of the largest were as follows : circumference of main trunk 74 feet ; ditto of main trunk and the supports 120 feet ; ditto of area covered by the branches, 610 feet ; estimated height 100 feet. The trees appear to be, so far at least as I have had opportunities of judging, confined to the *Tarái*, the drier parts of which they seem to affect, and they become more abundant towards the foot of the hills. They are said, however, to occur about some of the villages in this direction ; if so, they have probably been planted there, at any rate it is quite certain that on the southern side of the valley, along which considerable spaces occur totally devoid of forests, they are comparatively uncommon.

In the tracts of forests traversed by us and which I have said was estimated to be between 7 and 8 miles in length, 80 trees were seen : of these by far the greater number were of large size.

* This tree is known to the Assamese by the name *Borgach*, to the Khasiyas by that of *Ka-gi-ri*.



Ficus elastica Roxb.⁷⁴

As we have reason for supposing that they are equally abundant throughout the districts of *Chárdwár*, some approximation to their real number may be formed. Thus taking the length of the belt of forests in this district to be 30 miles, and its average breadth 8, we may form so many sections, each of the diameter of 100 yards, 50 yards being the utmost extent to which one is able to see on either side owing to the extreme thickness of the jangal. In the above thirty miles 528 sections will be formed, and the total number of trees, taking 80 as the average of each section, will be 42,240, and however overestimated this may subsequently prove to be, it is evident that the tree is very abundant, since, even in the infancy of the scheme, 300 maunds of juice have been collected in 30 days.

Nothing definitive can be stated of the probable number of trees in the whole valley. It is known to exist about *Goálpára* and at *Borháth*, on the south side of the valley, and I think that it will be found to exist along both sides, wherever a belt of *Túrái** exists. I have no doubt but that *Assam* alone will, when the value of the juice becomes more generally known to the natives, be able to meet all demands.

The tree likewise exists in plenty on the *Khásiya* mountains, on which it occasionally ascends as high as 4500 feet. Mr. ROYLE, in his *Illustrations*, p. 336 says, that it does not extend beyond *Pandua*, *Jaintipur* and *Chirra Punji*, but this statement is apparently made on no other grounds than that of its not having been then found elsewhere.

The geographical range of the tree, as far as has been hitherto ascertained, may be stated to be between $25^{\circ} 10'$ and $27^{\circ} 20'$ north latitude, and between $90^{\circ} 40'$ and $95^{\circ} 30'$ east longitude. Throughout this space it will be found in the densely-wooded tracts, so prevalent along the bases of hills, and perhaps on their faces up to an average elevation of 22,500 feet.

The attention of the public was, it appears, first directed to this tree by the celebrated Dr. ROXBURGH, a man worthy of the estimation he was held in by government, both on account of his extensive strictly botanical knowledge as well as of that of vegetable statistics.

The manner in which this discovery was made was given as follows : "Towards the close of 1810, Mr. MATTHEW RICHARD SMITH of *Sylhet* sent me a vessel there called a *turong* filled with honey in the very state in which it had been brought from the *Pándua* or *Jaintipur* mountains, north of *Sylhet*. The vessel was a common, or rather coarse basket in the shape of a four-cornered, wide-mouthed bottle, made of split ratans,

* Lieut. VETCH has since ascertained that the tree is as abundant in the district of *Naudwár*, as in that of *Chárdwár*.

several species of which grow in abundance amongst the abovementioned mountains, and contained about two gallons. Mr. SMITH observed that the inside of the vessel, was smeared over with the juice of a tree which grows on the mountains. I was therefore more anxious to examine the nature of this lining than the quality of the honey. The turong was therefore emptied and washed out, when to my gratification I found it very perfectly lined with a thin coat of caoutchouc*." Dr. ROXBURGH then mentions one or two facts, which are consonant with the views of modern vegetable physiology, viz. "that old trees afford a better and more indecomposable juice than young ones, and that during the cold season the juice is better but more scanty than in the hot. It is extracted by incisions across the bark down to the wood, at a distance of about a foot from one another, all round the trunk or branch up to the top of the tree; and the higher, the more abundant is the fluid said to be. After one operation, the same tree requires about a fortnight's rest, when it may be again repeated†." The only description hitherto given of the tree is that of Dr. ROXBURGH; it was drawn up from young specimens, but it is quite sufficient to enable one to recognise the plant. I subjoin a sketch of the only flowering branch I have hitherto met with. The roots of this really noble tree spread out in every direction on reaching the ground, and the larger ones are half uncovered: they occasionally assume the appearance of buttresses, but never to such an extent as those of some other trees. The nature of the trunk of this and some other species of the same genus is so extraordinary that it may not be amiss to make a few remarks on its structure. It differs in the first place from the ordinary form of trunk by its sculptural appearance, and it is from this that its extremely picturesque appearance arises.

The appearance arises entirely from the tendency of these trees to throw out roots both from the main trunk as well as from the branches, and from the extreme tendency these have to cohere with the trunk or with each other. If the roots are thrown out from or very near the main trunk, they ordinarily run down its surface, and cohere with it firmly and hence the sculptured appearance; if, as happens in some, they are thrown out from the branches at such a distance from the trunk that they do not come in contact with it, they pass down to the earth, and form what I call supports. These attain their maximum of developments in the banian and render the growth of the tree quite indefinite. These supports appear never to produce leaf, bearing branches, so long, at least, as they remain attached to the tree. They are generally per-

* ROXBURGH's *Flora Indica*, Vol. III. p. 543.

† ROXBURGH's *Flora Indica*, Vol. III. p. 544.

fectly straight at first, becoming conical only by divisions at the apex when near the earth, and by the mutual adhesion of these divisions.

Very generally, it would appear, this species, as well as some others, vegetates in other trees; its first processes of growth being probably similar to those of other arboreous dicotyledons. The roots, however in obeying the laws regulating their descent, soon come into contact, and wherever they do so, a mutual and firm adhesion is the result.

A net work is soon formed round the tree; the size of its reticulations soon diminishes with the increase in the number of roots; and at last a nearly solid and excessively firm cylinder is formed, which encloses, as it were in a case, the tree which originally protected the young seedling: to such an extent is this carried that the death of the tree is sure to occur sooner or later.

In such a case as this the fig-tree has, it may be said, no trunk at all comparable to ordinary trunks, which result from growth in an ascending direction. In these they originate from the aggregation and cohesion of roots, or from growth in a descending direction. One may hence readily imagine how easily such trees may overtop all others, for, if they vegetate on a tree 60 feet from its base, it is at once obvious that this distance is an actual gain in height over all the others. Such instances are perhaps the only ones in which epiphytes destroy the plants on which they grow. They may indeed be denominated parasitical epiphytes. As might be expected the seeds are indifferent as to the species of tree on which they vegetate: it is not uncommon to find two fig-trees entwined in a close embrace.

Dr. ROXBURGH was aware of this manner of growth, but he appears to have only seen palmyra trees enclosed in the way I have endeavoured to explain. The tendency to throw out roots is so excessive in the *Ficus elastica*, that any section through the back of the trunk or the supports of sufficient depth to reach the wooded structure, is sure to occasion their appearance. These roots or radicles are distinctly continuous with the outer fibres of the last formed wood, and so many are thrown out that the lower extremity of a transverse section of a support not unfrequently assumes the appearance of a very coarse tail. The union between the root commences by abrasion, and although I have not yet examined sections with reference to the degree of intimacy of union, I have but little doubt but that each union is an instance of true and spontaneous grafting.

The inflorescence of this tree remains to be explained, particularly as it would at first sight appear to be totally different from that of any other, and because such forms unless reduced to ordinary types, confuse

the minds of beginners. By the old school, the only one yet known on this side of India, and which even in England has too many advocates, each instance, almost, of anomalous form is at once elevated into a distinct or *sui generis* formation, as if nature in her wonderful workings had no distinct plan.

This was, and is, the great fault of the Linnæan School of Botany, and it is continually causing curious and really, at this period, quite inexcusable mistakes. If we turn over the pages of ROXBURGH'S *Flora Indica*, which relate to this genus, we shall find that the fruit is described before the flower—described in fact before it can possibly exist.

That which ROXBURGH called the fruit is the inflorescence, and consists of a hollow, more or less closed receptacle, on which minute flowers of different sexes are arranged. A receptacle on which a number of flowers is situated, is by no means uncommon, and I may point out familiar instances in the thistle, artichoke, dandelion, &c. in which the receptacle may be said to be almost at its maximum of development. Frequent instances of such enlarged receptacles occur in the natural order to which the fig belongs, particularly in *Dorstenia*.

In all these the receptacle is more or less flat; were we to take one of these flat receptacles and so dispose of it, that it shall become closed except at its apex, we shall have an inflorescence similar to that of a fig, the scales found at the aperture of which are analogous to the scales visible outside the heads of the beforementioned instances, and which, as is well known, form the edible heart of the artichoke. A fig may therefore be compared with the head of a compound flower, however different it may appear at first sight to be*.

The last point I have to notice with reference to these plants, is that they are, more especially the peepul, frequently infested by some parasites†.

The juice is procured from transverse incisions made in the larger root, which I have mentioned as being half exposed. The incision reaches the wood, or even penetrates it, but the flow of the juice takes place in these instances from the bark alone.

Under the incision a hole is scooped out in the earth, in which a leaf, folded up into the shape of a rude cap, is placed; for this purpose the leaves of *Phrynium capitatum* of LINNÆUS seem to be preferred.

* A fig might be proved almost to be an artichoke.

† M. DE CANDOLLE reasoning on the supposition that no parasites existed on trees furnished with milky juice, constructed an ingenious theory, which I have long known to be invalidated in the instance of the jack-tree.

This plan is simple, and far superior to that of incising the trunk as it ensures greater cleanliness. The larger roots are preferred in addition to their being half exposed, for yielding a richer juice.

The fluid on issuing is, when good, nearly of the consistence of cream, and of a very pure white.

Its excellence is known by the degree of consistence, and the quantity of caoutchouc, on which this would appear to depend, is readily ascertained by rubbing up a few drops in the palm of the hand, when the caoutchouc rapidly becomes separated. By kneading this up again, it rapidly becomes elastic.

Many incisions are made in one tree. The juice flows rapidly at first, but the rapidity diminishes after a few minutes.

It is said to flow fastest during the night: it continues during two or three days, after which it ceases, owing to the formation of a layer of caoutchouc over the wound.

The quantity obtainable by the above method from a single tree has not yet been exactly ascertained. Some of the natives affirm that four or even five maunds may be procured; others only give one ghurrah full or ten seers as the amount procurable. From the slowness with which it flows, I should consider half a maund to be a fair average produce of each bleeding. The operation is repeated at the expiration of 18 or 20 days. Assuming the rate of half a maund to be nearly correct, 20,000 trees will give as the aggregate of four bleedings 12,000 maunds of caoutchouc, that is if Dr. ROXBURGH's proportion of this product to aqueous matter, viz. $15\frac{1}{2}$ oz. to 50, be correct.

I should however, observe that the proportion of caoutchouc in the American juice is given by Dr. FARADAY as 45 in 100*, or nearly one in two. On the excellence of the Assamese products as compared with that of America, it does not become me to pronounce. If strength, elasticity, clearness and freedom from viscosity as well as from foreign matter be test of excellence, then this product may be considered superior to any other hitherto manufactured. Nothing can in fact well exceed, at least in these points, the best specimens manufactured by Mr. SCOTT. It has been pronounced by persons resident in Calcutta to be excellent, and the only objection that has hitherto been raised against it *on sufficient examination* is that of Mr. BELL, who says it snaps. But if by this we are to understand snapping from being allowed to return to its original dimensions from the state of tension, the objection amounts to an excel-

* *Mechanic's Magazine*, 24, 440. Mr. SCOTT finds that the proportion varies from four to six parts in 10, the variation depending probably on the part of the tree from which the juice is extracted.

lence. Mr. McCOSH has indeed declared it to be inferior to the South American article, but this decisive judgment has evidently been made on casual examination of perhaps the worst possible specimens. Decisions such as these are totally inadmissible in any work, much more so in the one alluded to* which from the materials placed at the author's disposal, should at least have been correct.

On the points of comparative excellence of the two products we shall soon, it is to be hoped, be set at rest. Lieut. VETCH† has submitted numerous excellent specimens to the London Caoutchouc Company, and Mr. SCOTT and Mr. BROWNLOW are engaged on a series of experiments, which promise complete success.

It is to be hoped that samples may be sent to the Society of Arts, whose reports on all these subjects are so excellent and so readily and obligingly furnished. I think, however, it is desirable that Dr. O'SHAUGHNESSY be requested to draw up an analysis both of the Assamese and American products, as that analysis would at once set at rest the comparative amount of caoutchouc as well as of its solubility.

As this tree promises to become an important source of revenue, all possible precautions should be taken, to ensure the present stock from injury and to increase the number of trees so that the province may be able to meet any demand. With reference to the first point it will be quite sufficient to limit the bleedings to the cold months, so that during the season of the greatest activity of vegetation, the trees may remain unmolested, and this is more particularly necessary from our having reasons for supposing that the juice will be during the period alluded to much less rich in caoutchouc. I would therefore propose the interval between April 1st and November 1st as the season of rest. The size of the tree being such as to preclude any possibility of great injury resulting from the abstraction of the juice, the bleedings if indeed it be possible to limit them, may recur at intervals of one month.

The best check, however, to over-depletion will be the rigorous rejection of all over thin juice. The plan now adopted for the extraction of the juice needs no modifications, for it is simple, effectual and cleanly. For increasing the number of trees the formation of plantations will be necessary. The sites chosen for these should be both in the forests themselves as well as in and about those villages which, from being situated near the edge of the forests, may seem adapted to the end in view.

* *Medical Topography of Assam.*

† It cannot be too well known, that it is owing to the exertions of this officer that the existence of this valuable tree in abundance has been ascertained.

There is every reason for supposing that this tree presents every facility for multiplication by division, and probably the plan pursued by the natives with the peepul will be effectual for this purpose: a branch is chosen of the thickness of a man's thigh, and of a height of 15 or 20 feet; all its branches with the exception of one or two at the apex are to be lopped off clean, and the wounds to be plastered over with clay. The cutting is to be planted out at the commencement of spring, that is in March or April*.

The jangal must be cleared, but not so much so as to expose the cuttings to the full influence of the sun. It must be borne in mind that the tree is one which requires an immense space, should rearing from seed be resorted to, which however, can scarcely be necessary; it must be remembered also, that the most favorable situation for ensuring their vegetation would appear to be on other trees, and they should be so placed as not to be liable to be removed either by rain or wind. Some manure should be placed with them so as to imitate as much as possible that with which they are generally supplied by birds.

The substance, caoutchouc, is a widely disseminated constituent of vegetable fluids. It has hitherto, I believe, been found only in plants with milky juice, although its presence in all plants yielding such fluid remains to be proved. The presence of caoutchouc in silk has been, I believe, attributed to the nature of the fluids of the plants on which the caterpillars feed: but this, although applicable to the mulberry plants, can scarcely hold good with the various species of *Tetranthera* on which the Moonga feeds, or with the castor-oil plant the chief food of the *Eria*, which in *Assam* does not appear to yield milk. Milky juice is often characteristic of certain families, but often not: its presence is frequently of importance, as it often affords valuable indications of affinity. It is remarkable that it is almost unknown in the grand division of Monocotyledonous plants. The families in which its presence may be said to be universal are Apocqueea, Asclepiadea, Campanulacea, Sobeliaceae, and the great division of Compositæ, Chichoracea, of which the lettuce is a familiar example. It is of common occurrence in Euphorbiaceae, and Tuliceae, which orders may be looked on as the grand sources of caoutchouc. Thus, in addition to our Indian plants, the *American* caoutchouc is supposed to be produced by *Cecropia peltata* which belongs to Urticeae, and the Ule tree of Papantla, from which the caoutchouc of that country is obtained, is supposed to belong to the same orders. I must, however, observe that Baron HUMBOLDT objects to the supposition of

* For this information I am indebted to Captain JENKINS.

Cecropia peltata yielding the *American* caoutchouc, as its juice is difficult to inspissate*.

The order Euphorbiaceæ would likewise appear to supply a large quantity. Thus Dr. LINDLY informs us that the true caoutchouc is furnished by *Siphonia elastica*, *Hevia quiancusis* of AUBLET, a Surinam and Brazilian tree; and it is from a tree of this order that a substance resembling caoutchouc is procured in Sierra Leone.

Some Apocquææ are also reported to produce good caoutchouc†; thus *Aricola elastica* produces the caoutchouc of *Sumatra*; and it is from this plant that caoutchouc has been produced in *Penang* and exported to England‡. *Willughbeia edulis* is likewise an *Indian* plant from which caoutchouc has been produced, but ROXBURGH says it is of indifferent quality; unless I have been misled, good caoutchouc is obtained from *Nerium grandiflorem* of ROXBURGH.

It is probably equally abundant in Asclepiadeæ; one plant of which order *Cynanchum albiflorem* has been stated to yield it of excellent quality in *Penang*. Mr. ROYLE seems inclined to attribute the great tenacity of the fibres of some plants of both these orders to its presence, but this supposition seems to me of very doubtful accuracy§.

It is to these orders therefore, viz. Tritecia, Euphorbiaceæ, Apocqueæ, and Asclepiadeæ that I would beg to direct particular attention. The relative values of the various caoutchoucs is still open to investigation. The relative values of the milky juice as sources of caoutchouc depend on their freedom from viscosity, and this is very readily ascertained by rubbing up a few drops in the palm of the hand: in freedom from this material nothing can well exceed the juice of the *Ficus elastica*.

Too much attention in fact can scarcely be paid to all plants affording milky juice; as in the event of a diminution in quantity from the present sources, chemists may possibly devise some means of extracting it from those materials, which at present are disregarded. This of course, only holds good provided the assumption that the juice of all plants of a milky nature contains caoutchouc, proves correct. A historical retrospect of caoutchouc may be found in the *Mechanic's Magazine*, vol. 24, page 434. In this the opinions of Dr. ANDERSON, on the probable future extensive utility of this substance are given at length; the author however appears to consider these views as overdrawn, and

* LINDLY's Introduction to Natural system of Botany, p. 176.

† LINDLY's Instructions, p. 300.

‡ ROYLE's Illustrations, p. 329, under Euphorbiaceæ, and p. 270, under Apocqueæ.

§ ROYLE's Illustrations, p. 274.

they are so certainly, if we look to the *modus operandi* proposed by Dr. ANDERSON.

But if we look to the late improvements by which this substance is rendered tolerably manageable, we can scarcely imagine any limit to its sphere of usefulness. If it be limited, it will be owing to the fact that the supplies cannot meet the demand. It is well known that the demand for this article has called into existence the London Caoutchouc Company, and their attention appears to have been directed towards India by Mr. ROYLE (to whom this empire will very probably be under very great obligations) and to *Assam* in particular by Professor SELDEN. It is much to be wished that all communications regarding new products of value should be very explicit, for it is but seldom that in this country opinions of value are to be obtained. The plan recommended by the caoutchouc committee, viz.; that of forming the caoutchouc into bottles is perhaps the worst that could be recommended: it is bad from its great tediousness and laboriousness, bad from its causing the blackening of the caoutchouc, and bad from its not obviating the viscosity of this when exposed to the sun. And it may reasonably be asked of what possible use the form of bottles can be when the bottle is not meant to hold a solution but to become one*.

It is much to be regretted that the handsome premium proposed by this company should have been limited to caoutchouc prepared in the South American manner: the premium should have been open to any form of manufacture and limited only with reference to quality. The same plan has of course been followed by the Agri-Horticultural Society of Calcutta, with this difference that the reward is much smaller, indeed ridiculously so, when compared to the extravagant rewards allotted to other products of comparatively no value and in many cases of rather visionary attainment. In all such cases, Societies would do well to proportion the amount of rewards to the amount of value. I am not aware whether the juice itself is in demand: this is certain however, that with slight precautions it will keep for a very long time.

The presence of petroleum in abundance along the southern boundary of the valley may possibly suggest another mode of exportation, but there are it appears to me considerable objections to the exportation of this valuable substance in any other form than that now practised. In conclusion I would beg to apologize for the very imperfect nature of this report, but my means of observation have been limited, and the stock of

* The uselessness of the plan alluded to at once struck both Lieutenant VETCH and Mr. SCOTT, who were led to pay attention to the caoutchouc from the caoutchouc company's circular.

information hitherto laid before the public is certainly sufficiently scanty.

Mr. SCOTT having very obligingly furnished me with a series of specimens illustrating the relative advantages of his various modes of preparation. I have the honor of submitting them for inspection.

The numbers refer to Mr. SCOTT's extensive series of experiments, which throw much light on these important articles, and which are additionally valuable, from the readiness with which this gentleman has rendered them available to all in *Assam*.

No. 10 Juice formed into a mass without any care.

6 Juice dried upon a non-absorbing surface.

3 Juice dried upon an absorbing surface.

9 Juice worked up in the hand, bleached in water, and subjected to a pressure of about 4 maunds to the square foot.

8 Juice worked up with the hand and not bleached.

7 Juice boiled with an equal quantity of water and subjected to a similar pressure; this has been exposed to the sun without deterioration.

5 Juice boiled in a smaller quantity of water, and subjected to the same pressure.

11 Prepared from equal parts ($\frac{3}{4}$ iv.) of juice and water, with $\frac{1}{2}$ oz. of diluted sulphuric acid of the *Edinburgh Pharmacopæia*: less acid, however, will destroy the coloring matter.

12 Juice prepared with concentrated sulphuric acid.

IV.—*Notices on the different systems of Buddhism, extracted from the Tibetan authorities.* By ALEXANDER CSOMA KÖRÖSI.

Sāṅgyé (སངས་རྒྱལ་: Sangs-r,gyas), is the generic name for expressing the Supreme Being or intelligence in the Buddhistic system. This term corresponds to the Sanskrit *Buddha*. In Tibetan it denotes the most perfect being, that is pure (or clean) from all imperfections and abounds in all good qualities.

There are three distinctions with respect to the essence, the substance or body of BUDDHA; as

1. *Dharma kāya* (ཆོས་ཀྱི་སྐུ—chos-kyi-sku); 2. *Sambhogkāya* (ལོངས་སྤྱད་རྩོགས་པའི་སྐུ—longs-spyod-rdsogs-pahi'-sku), and 3. *Nirmāṇkāya* (སྐྱུ་ལ་པའི་སྐུ—sprul-pahi-sku). The first as the primary essence of all things, is denominated by several names; as, *A'di Buddha* (འདྲི་མའི་སངས་རྒྱལ་)—*Samanta Buddha* ལྷན་ཅུ་པཟང་པོ་;—*Swabhāva* འདུག་པོ་, self-produced, or self-existing; *Dharmadhātu* ཆོས་ཀྱི་རབྱེད་ས་,

the root of all things ; ཐུ་བ་པ་རྣམས་ཀྱི་ཐུ་བ་པ་ the Jina of Jinas ; རྟན་གྱི་གཞི་ the basis of all things ; དུས་གསུམ་དུས་མེད་ existing without the three times, or without beginning and end.

To the *Sambhogkāya* belong the *Dhyāni Buddhas* of five kinds, the chief of whom is *Vairochana* (or *Bèrotsana*, as the Tibetans pronounce it, called by them, རྣམ་པར་སྒྲུབ་པ་མཆོད་—*nam-per-snang-mtsad*: the illuminator. These are the attendants of *A'di-Buddha*.

To the third or *Nirmankāya* belong the several incarnations of Buddha. Immense is the number of such Buddhas that have appeared in former ages in the several parts of the universe. In this age (styled the happy age) the number of incarnations of Buddhas is one thousand, four of whom have appeared hitherto, and the rest are to come hereafter. Though there are mentioned many Buddhas as having appeared and having taught their doctrines, yet in the modern Buddhistic system every thing is attributed or referred to SHÁKYA, who is supposed (by the Tibetans) to have lived about one thousand years before Jesus Christ.

The different systems of Buddhism derived from India, and known now to the Tibetans are the following four.

1. *Vaibhāshika*, (བྱེ་བླ་པ་—*byè-brag-pa*.)
2. *Sautrāntika*, (མདོ་སྡེ་པ་—*ndo-sdè-pa*.)
3. *Yogāchārya* (ཆེན་པོ་འཇུག་པ་ or རེ་མས་ཅི་མ་པ་—*nal-hbyor-spyod-pa*, or *sems-tsam-pa*).
4. *Madhyāmika* (དབུ་མ་པ་—*dvu-ma-pa*),

The first consists of four principal classes with its subdivisions. They originated with SHÁKYA's four disciples ; who are called in Sanskrit, RA'HULA, KA'SHYAPA, UPALI, and KA'TYA'YANA.

1. RA'HULA (Tib. སྣ་གཤམ་འཇུག་—*sgra-gchan-hdsin*), the son of SHÁKYA. His followers were divided in four sects. They recited the Sūtra on emancipation, in Sanskrit ; they affirmed the existence of all things ; they wore on their religious garb from twenty-five to nine narrow pieces of cloth. The distinctive mark of this class was an *utpala padma*, (water-lily) jewel, and tree-leaf put together in the form of a nosegay*.

2. KA'SHYAPA (འོད་སྟེང་—*Hod-srung*), of the brahman caste. His followers were divided into six sects. They were called the "great community." They recited the Sūtra of emancipation in a corrupt dialect. They wore on their religious garb from twenty-three to three pieces of narrow cloth ; and they carried a shell or conch as a distinctive mark of their school.

* May not these notes explain the marks on our Buddhist coins?—Ed.

3. UPA'LI (Tib. ཉེ་བའི་འཁོར་འཁོར་—Nyé-vár-hkhor), of the *Súdra* tribe. His followers were divided into three sects. They recited the emancipation *Sútra* in the language of the flesh-eaters, *Pisháchika*. They wore on their religious garb from twenty-one to five pieces of narrow cloth. They carried a *sortsika* flower as a mark of their school. They were styled, "the class which is honored by many."

4. KÁTYÁYANA (Tib. ཀའ་ཡུ་རྩུ་—Kátyáhi-bu), of the *Vaisya* tribe. His followers were divided into three sects; they recited the emancipation *Sútra* in the vulgar dialect. They wore the same number of narrow pieces of cloth, as the former class, and they had on their garb the figure of a wheel, as the distinctive mark of their school. They were styled: "the class that have a fixed habitation," ཇམ་མཉམ་བཞུགས་པ་.

The followers of the *Vaibhāshika* system, in general, stand on the lowest degree of speculation. They take every thing in the scriptures in their most vulgar acceptations; they believe every thing, and will not dispute. Secondly, of the

2. *Sautrātika* school (མཛོ་སྡེ་པ་—*mdo-sdé-pa*), a follower of the *Sútras*. There are two classes, the one will prove every thing by authorities contained in the scriptures, the other by arguments.

3. The third division is that of the *Yogáchárya*, (ནཱ་འཕྲུལ་སྤྱོད་པ་—*nal-hbyor-spyod-pa*, or སེམས་རྩིམ་པ་—*sems-tsam-pa*.) There are counted nine subdivisions of this school. The principal works on this system are referred to A'RYA SANGA (འཕགས་པ་ཉལ་མཉམ་པ་) in the 7th century, about of our era. There are in the *Káh-gyur* several works of his, and of his followers, explanatory of the *Yogáchárya* system. Lastly, the

4. *Madhyámika* school, (དབུ་མ་པ་—*Dvu-ma-pa*, they that keep a middle way.) This is properly the philosophical system. It originated with NÁGÁRJUNA (ལྷ་སྒྲུབ་—*klu-sgrub*), 400 years after the death of SHÁKYA. His principal disciples have been A'RYA DEVA and BUDDHA PALITA. There are in the *Stan-gyur* several works of them on the *Madhyámika* system. Some learned pandits in India have united this system with that of the *Yogáchárya*, as BODHISATWA (or SHANTA RAKSHITA has done) in the 8th century, and afterwards ATISHA in the 11th.

CHANDRA KÍRTI རྒྱ་བ་བྲག་པ་, wrote a commentary on the original work of NÁGÁRJUNA; as also several other works introductory to, and explanatory of, the *Madhyámika* theory. In all the higher schools in Tibet these works are now the chief authorities in all controversies relating to the *Madhyámika* system.

From among the four theories above specified, only the two last are philosophical, the two first being rather dogmatical, or following implicitly scriptural authorities. According to the views of some writers, there is little difference between the *Yogáchárya* and the *Madhyámika* theories also, as some have united them; except that the former is more practical and the latter more theoretical or speculative (dealing with too many abstract terms, and minute discriminations). In the Do class of the Stan-gyur, there are many volumes containing works explanatory of both these systems. But they can be understood only by the learned, the generality of the religious persons (or the clergy) prefer to read Tantrika works, the Dulvá, and some tracts of the Do class of the Káh-gyur.

The above mentioned systems are well known to many of the learned in Tibet; but there are likewise many who are acquainted only with their names.

There is another distinction (with which the Tibetians are more familiar, and which is taken from the scriptures) with respect to the principles, on which the scriptural works are founded; that of ཐཱིན་པ་གསུམ་ Thég-pa-gsum; S. *Tri-yánam*, the three vehicles. Accordingly all Buddha scriptures are calculated for the lowest, the mean or middle, and the highest capacities; for, they contain low or vulgar, middle, and high principles to be known by such as aspire to any degree of perfection.

Some writers have used the name of "Lám-rim," degrees of way (to perfection), considering men on three different degrees of intellectual and moral capacity; as, men of little, middle, and highest capacities. Under this title there are now in Tibet (among those of the Géluk-pa sect) several manual works on the principles of the Buddhistic religion. Among these "Lám-rims" the most esteemed and the most comprehensive is that of TSONKHA-PA, a celebrated Láma, who flourished in the beginning of the fifteenth century.

According to the Lám-rim, there are three degrees of principles with respect to the theory of the Buddha faith.

1. Men of vulgar capacity must believe that there is a God, there is a future life, and that they shall therein have the fruits of their works in this life.

2. Those that are on a middle degree of intellectual and moral capacity, besides admitting the former positions, must know, that every compound thing is perishable, that there is no reality in things; that every imperfection is pain, and that deliverance from pain or bodily existence, is final happiness or beatitude.

3. Those of the highest capacities, besides the above enumerated articles, know that from the body or last object to the supreme soul,

nothing is existing by itself, neither can be said that it will continue always, or cease absolutely ; but that every thing exists by a dependent or causal connection or concatenation.

With respect to practice, those of vulgar capacity are content with the exercise of the ten virtues. Those of a middle degree, besides the fulfilling of the ten virtues, endeavour to excel in morality, meditation, and ingenuity or wisdom. Those of the highest capacities besides the former will perfectly exercise the six transcendental virtues.

With respect to their summum bonum.

The first seeing the miseries of those suffering in the bad places of transmigration ; as, in hell, *Yidáks*, and beasts, wish to be born among *men*, the *asurs* and the *gods*.

Those of the second class, not contented with the happiness of the former, wish for themselves only to be delivered entirely from pain and bodily existence. Lastly ; these regarding as pain, every bodily existence, in whatever region of the world it be, aspire to final emancipation, and wish to arrive at the supreme perfection, that they may become able to help others in their miseries.

Such distinction in speculative Buddhism, as that of the *Swabhāvika*, *Aishwarika*, *Kármika*, and *Yútnika* does not exist in Tibetan books (except, perhaps, among the Nyigmā-pa sect, who are said to possess yet several volumes that have not been printed in the Káh-gyur and Stan-gyur collections, but which may be found in Tibet both written and printed, among the people of that sect), although there are many works in the Stan-gyur containing materials on the several doctrines or tenets of those philosophical schools.

The ancient philosophical sects in India mentioned frequently, and partly described in the Tibetan books, especially in the Stan-gyur volumes are as follows :

1. Grangs-chen-pa (གངས་ཅན་པ་—*Sánkhya* in Sanskrit). The Buddhists have adopted much of this school. In the 32 and 33 volumes of the Do class in the Stan-gyur, there is an account of the six schools (and of others also) in ancient India.

2. Chè-prág-pá (ཇེ་པ་ར་པ་—*S. Vaisheshika*).

3. Rig-chet-pá (རིག་ཇེ་པ་—*S. Védantika*).

4. Shot-pá-pá (ཤེ་པ་པ་—*S. Mimánsaka*).

5. Jigten-gyáng-phen-pá (ཇིག་ཇེ་པ་—*S. Lokáyata*).

6. Those that take Váng-chuk (བཟང་ཅུག་—*S. Ishwara*) for the first principle.

7. They that take Ts'hángs-pá (ཨྲྀང་པ་ *Brahmá*), for the first principle.

8. They that take Khyáb-juk (ཁྱེད་ལྔ་པ་—S. *Vishnu*), for ditto.

9. They that take Skyes-bu (སྐྱེས་བུ་—S. *Parusha*), for ditto.

10. They that take gTsovo (གཏོ་བོ་—S. *Pradhána*) for ditto.

11. They that take time (རྩལ་—S. *Kála*), for ditto.

12. The atomists or they that take rdul-phran (རྩལ་པ་ཤྲན་) the atoms for the first principle of the existence of the world. There are yet some others also.

The general principles of practical Buddhism with a follower of this faith in Tibet, are such as follow.

1. To take refuge only with Buddha.

2. To form in his mind the resolution of endeavouring to arrive at the highest degree of perfection, to be united with the supreme intelligence.

3. To prostrate himself before (the image of) Buddha; to adore him.

4. To bring offerings before him, such as are pleasing to any of the six senses; as, light, flowers, garlands, incenses, perfumes; all sorts of edible and drinkable things, (whether raw or prepared,) stuffs, cloths, &c. for garments and hanging ornaments.

5. To make musick, sing hymns, and utter praises on Buddha, respecting his person, doctrine, love or mercy, his perfections or attributes; his acts or performances for the benefit of all animal beings.

6. To confess one's sins with a contrite heart; to ask forgiveness of them, and to declare sincerely not to commit such afterwards.

7. To rejoice in the moral merits of all animal beings, and to wish that they may contribute them to obtain thereby final emancipation or beatitude.

8. To pray and exhort all the Buddhas that are now in the world to turn the wheel of religion (or to teach their doctrines) and not to leave soon the world, but to remain here for many ages, (*Kalpas*.)

V.—*Enumeration of Historical and Grammatical Works to be met with in Tibet. By the same.*

Works, containing historical matter, may be found, in Tibet, under the following names:

1. *Lo-gyus* (ལོ་གྲྱུ་ *lo-rgyus*), meaning annals, chronicle, history.

2. *Tam-gyut* (ཐམ་གྲུ་ *gtam-rgyud*), tradition, oral account, traditional history. (S. *A'khyánam*.)

3. *Ch'hos-jung* (ཆོས་འབྱུང་ *ch'hos-hbyung*), origin and progress (of the elements) of the (Buddhistic) religion.

4. *Tokzhot* (ཐོག་མཐུན་བཤམ་ *rtogs-brjod*), properly a judicious saying ; memoir, reflections, critique, biography.

5. *Nam-thár* (ནམ་ཐར་ *nam-thar*), properly emancipation, liberation, biography, legend.

6. *Grung* (གྲུང་ *Grungs*), a fable, fiction, fabulous history.

7. *Stan-çis* (བསྐྱར་རྩིས་ *Bstan-rtsis*), chronology, or calculation of some events or epochs occurring in the sacred volumes.

To the first class or "*lo-gyus*" may be referred the following works, on account of their contents being of a historical character.

1. *Máni-kábum* (མཎི་བཀའ་འབྱུང་ *má-ni-bkah-hbum*), an historical work, composed by SRONG-TSAN-GAMPO (ལྷོ་བཙུན་གླམ་པོ་ SRONG-BTSAN-SGAM-PO), a celebrated king in Tibet, in the seventh century of the christian era.

2. *Pádma-thing-yik* (པདྨ་ཐང་ཡིག་ *Padma-thang-yig*) another historical work, written in the eighth or ninth century, in the time of KHRI-SRONG DE-TSAN (ཁྱི་སྲོང་ལྷུ་བཙུན་ by an Indian guru, called in Tibetan PADMA JUNG-NE, (པདྨ་འབྱུང་ལུ་པལ་), in Sanskrit *Padma Sambhava*.

3. *Ká-thángdé-ná* (བཀའ་ཐང་སྡེ་ལྷ་), by the before mentioned guru, and by some Tibetan translators or lotsavas, in five parts, containing biographical notices of princes, queens, chief officers, pandits and lotsavas or Tibetan translators.

4. *Yik-nying* (ཡིག་ནིང་), ancient writ or chronicle, compiled by the ancient Tibetan translators.

5. *Yik-zhung-ch'hen-mo*, (ཡིག་ཅུང་ཆེན་མོ་), containing Indian history from ASOKA (ཡུ་དན་མེད་ *mya-nān-med*, in Tibetan) a king, (who lived one hundred and ten years after the death of SHÁKYA, and had his residence at *Pataliputra* and *Dehli*) till the time of PRATITA SE'NA (in the beginning of the fourteenth century of our era).

Other historical works are known under the following titles :

6. *Ká-tsik-ch'hen-mo* (བཀའ་ཆོས་ཆེན་མོ་).

7. *Ká-ch'hem-ká-k'hol-ma* (བཀའ་ཆེས་པ་བཀའ་འཁོལ་མ་).

8. *Gyel-rab-pag-sam-jon-shing* (རྒྱལ་རབ་པ་དཔལ་བསམ་ལྗོན་ཤིང་).

9. *She-cha-rap-sal* (ཤེ་ཅ་རཔ་སེལ་).

10. *Gyel rap-salvai-mélong* (རྒྱལ་རཔ་སེལ་བའི་མེ་ལོང་).

11. *Bod-kyi-yik-ts'ang* (བོད་ཀྱི་ཡིག་རྩིང་), Tibetan records.

12. *Dep-ter-non-po* (དེབ་ཐེར་ནོན་པོ་), ancient records.

13. *Sa-s,kya-yik-ts'ang* (ས་སྐལ་ཡིག་ཚང་), records made in the Sa-skyā monastery.

14. *Gyahi-yik-ts'ang* (ཐུན་ཡིག་ཚང་), Chinese records, translated by BLAMA RIN-CH'HEN-GRAGS-PA.

There are in Tibet some historical fragments under this title, *Gtam gyut* (གཏམ་རྒྱུ་), traditional history, also.

Under this title, *ch'hos-jung* (ཆོས་རྒྱུང་), Elements of religion, or the origin and progress of the Buddhistic religion, there are several works in Tibet, according to the different authors. As by NE'L-PA, by BU-S,TON; the *Ch'os'jung* of the *Bkah-gdams-pa* sect, that originated in the eleventh century; ditto of the *Bruk-pa* sect, by PADMA KARPO.

Under this name: "*Tokzhot*" (ཐོག་མཐོག་པོ་ *S. Avadāna*), there are many historical fragments both in the *Káh-gyur* and *Stan-gyur* (especially in the 37 or thirtieth volume of the *Mdo* class of the *Káh-gyur*, mostly of a legendary character. But besides these there are also true narrations. The following work is of a mixed character of this kind: *ཤམ་བཤང་དང་འཕགས་ལུག་གི་ཆོག་པོ་པོ་* "*sham-bha-lahi rnam bshat-dang p'hak-yul-gyi-rtokzhod*"—Description of Shambhala (a fabulous country and city in the north of *Asia*). And a memoir on *p'haks-yul* (*S. A'rya dēsa* or *India*, in general), written by PAN-CH'HEN PALDAN YE-SHES, the great Lama at *Tashi lunpo* (བཟུང་ཤིས་ལྷ་མོ་) in 1775.

Under this name: "*nám thár*" (ནམ་ཐར་), there are many historical works in Tibet, containing narratives of the life of any great personage, as the life of SHÁKYA, in a *mdo* or *sútra*, called *ཐུ་ཆེར་འཕྲུལ་* (*gya-cher-rol-pa*) or "*Lalita vistara*" in Sanskrit. As also in the *Mdo* styled *མངོན་པོའ་འབྱུང་བ་* *non-par-jung-va*, his appearance in the world (in a religious character).

To this class belong the following works, as: *Dpag-bsam-k'hri-shing* (དཔག་བསམ་ཁྱི་ཤིང་), by DGE-VAHI-DVANG-PO (*S. Shubhendra*), translated from Sanskrit. The "*rnām-t'har*" or legendary narrative (contained in the *bstan-gyur*) of eighty-four persons, in ancient India. How they were emancipated, or acquired preternatural faculties.

The *ནམ་ཐར་* *rnām-thar*, of the sixteen principal disciples (གཞན་པ་བཅོད་ nétan) of SHÁKYA.

The hundred acts of SHÁKYA compiled by TÁRÁNÁTHA, a Tibetan Lama, in the seventeenth century.

The twelve acts of SHÁKYA, by SRONG-TSAN-GAMBO, in the *Mani-kabum*.

The “skyés-rabs-brgya-pa” or one hundred new births or regenerations, by a Lama of the Karmapa sect.

There are in the *Dulva* biographical notices of several princes wealthy citizens, and other illustrious persons, in ancient India.

Amongst the Grungs (ལྷ་རྒྱལ) or fabulous narratives, the “*Kesár Grungs*” (འཇུ་ལྷ་རྒྱལ) or fabulous history of KESAR a warlike ancient king in central Asia, is much celebrated in Tibet.

On *Stan-çis* (Br འཇུ་རྒྱལ་རྒྱུ་མཉམས་པའི་ལོ་རྒྱུས་) or astronomical calculations of some events or epochs, occurring in the sacred volumes or Shástras, there are likewise several works, in Tibet. Of this kind are the commentaries on the “*Kála chakra* or *dus-kyi-hk’hor-lo*,” in Tibetan, made by several learned men,—as; by “Bu-ston” (བུ་སྟོན་) in the fourteenth century, by “Jo-nang-pa” by “Mk’has-grub” in the fifteenth century; by “Panch’hen-blo-bzang-ch’hos-kyi-rgyel-mts’han,” by “Padma karmo”—(a celebrated Lama of the Bruka-pa sect, in the sixteenth century.

Also a commentary on the Kála chakra, and the history of the Buddhist religion, written in Tibetan by a Mongol Lama (Sum-bha-zhabs-trung) in the last century.

The “*rtsis-kyi-hbyung-k’hung*” (རྩིས་ཀྱི་འཕྲུལ་རྒྱུ་མཉམས་པའི་ལོ་རྒྱུས་) elements of calculations by “Mk’HAS-GRUB-RGYA-MTS’HO” and “NOR-B-ZANG-RGYA-MTS’HO.” The substance of these works have been embodied in the “*Baidurya*, *Dkarpo*” an astronomical, &c. work, written by “SANG-RGYAS-RGYA-MTS’HO,” a regent at Lassa, in the last half of the seventeenth century.

List of such Indian (or Sanskrit) grammatical works, as have been known to the ancient Tibetan learned men, and partly have been translated into Tibetan, or have been only quoted by them.

The names of these works have been collected in the last volumes of the Bstan-gyur compilation. They are as follows: *Páni-vyákarana*, in two thousand slókas; *Maha-bhána*, a commentary of the former in one hundred thousand slókas, by KLU-NOR-RGYAS-KHI-BU”—not translated. An abridgment of the two former by RÁMA CHANDRA.

A grammar, in twenty-four chapters, by CHANDRA GOMI.

A commentary on the twenty prepositive particles, by do.

A Súra on the letters, by do.

A commentary on the letters, by CH’HOS-SKYONG (S. *Dhermapala*).

The several cases of nouns, by CHANDRA GOMI, in explanatory verses.

Another grammatical work, by ZLA-VA-GRAGS-PA. (S. Chandra kirtti.)

A commentary on the *Chandrapā* by Pandita RATNA MALI, in twelve thousand ślokas.

A commentary on the former by Pandita PURNA CHANDRA, in thirty thousand ślokas.

Dvyings-mdohi-hgrel-pa, a commentary on the verbal roots, by "BYINS-KYI-DPUNG-GRYEN."

Ting-mthahi-bshad-pa: explication of the "ting" termination.

The milch-cow of desire.

The eight compositions.

The *Kalāpa* in fifteen chapters, by DVANG-PHYUG-GO-CH'HA.

Sde-spyod byā-karana, in five hundred ślokas, a commentary on the *Kalāpa*, by brahman UGRA BHU'TI.

The "Si," &c. &c. of the *Kalāpa*, explained by HJAM-DPAL-GRAGS-PA (S. *Manjukirtti*).

A grammatical work, introductory to every speech or language.

A commentary on the same, by a teacher: SUBHÁSHA KIRTTI.

A commentary on the twenty prepositive particles, by DVANG-PO-BYIN (S. *Indradatta*.)

Dyangs-chan-byákarana (of *Saraswati*) in thirty-one chapters.

Six great commentaries of the former, and several smaller ones.

ཡྲ (un) and other terminations explained in a Sūtra, by DUR-SING.

A Sūtra on the ཡྲ (un) termination, by "CHANDRA"—with a commentary by the author himself.

A Sūtra of roots in the *Kalāpa* and in the *Chandrapa*, by "Gang-vahi-zla-va" (S. *Púrṇa Chandra*).

ཉི (ti) and other terminations of actions, &c. explained by dGah-vahi-grags-pa.

Collection of words having the same sound but different signification. *Hjam-Dvyangs* (S. *Manju-ghosha*) *byákaranahi-r,tsta-va*, by SADHU-KIRTTI.

A commentary on Pánini's grammar, by RAMA CHANDRA.

Panini-byings-mdo (the roots Sūtra, of Panini), by Pandita hjijs-med-e,dé.

On the above enumerated Indian grammatical works, there are some commentaries made by the Tibetans. As; by "Bu-ston-rin-ch'hen-grub" and "Zhalu-lo-tsa-va ch'hos-sk'yong-bzang-po."

There are, likewise, in Tibet, several works teaching how to read the Sanskrit text, especially the mantras. The most common are those (both the text and the commentary on) written by "SANGHA SKRI" at *Snar-thang*. But there are others also, made by TÁRÁNÁTHA, by KUNLE'GS, by DDE'-LE'GS, and by SITUPA.

The most ancient grammatical work extant for the Tibetan language is that made by "SAMBOTA" in the seventh century. Its Tibetan name is : "*Lung-du-ston-pa-sum-chu-pa*" and "*r,Tugs-kyi-Pjug-pa*" or grammatical introduction in thirty slókas, and the adding of the characteristic letters (for the formation of the several cases of nouns, &c.)

Both these treatises are very short, making not more than three or four small leaves. They give little information, and are interesting only on account of the grammatical terms. But there are now many commentaries on this original text, composed by the authors, whose names here follow, as : Dvu-pa-bLo-gsal, Lo-ch'hen-Nam-Mkhah-rgya-Mts'ho, sNar-thang-lo-tsá-Sangha-Shri, Yar-hbrog-pa-rin-ch'hen-tog, dgé-yé-va-ts'hul-k'hrims-Sengé, Pan-ch'hen-gser-mdog-chan-pa, dpah-vo-gtsug-lag H,p'hreng-va, Zur-Mk'har-va-bLo-gros-rgyal-po, Rab-hbyams-smra-va-ch'hos-rgyal, Hol-pa-rab-hbyams, Sman-lung-pa-bLo-moh'hogdrdo-rjé, Zha-lu-lo-tsá-va-ch'hos-skyong-Bzang-po, Yha-lu-pa-ch'hos-legs, Byams-gLing-Bsod-nams-rnam-r,gyal, Kun-mk'-hyen-go-ram-pa. (These two last have commented only the "*Sum-Stchu-pa*.") Zag-lung-ch'hos-rjé, Rab-hbyans-pa-jam-gral, K'ha-rag-sprul-sku, Drung-yig-hjam-Dvyangs, (these have written answers to some proposed questions respecting grammar). Pan-ch'hen-dkon-Mch'hog-ch,hos-grags, (he wrote in the seventeenth century, under this title ; "*Légs-Bshad-snang byed-norbu*" on sixty-four leaves.)

SITU, or LDOM-BU-PA of *Derghé* in *Kham-yul*, wrote in the last century, on eighty-six leaves. The title of his gramnar is : "*mk'has-pahi-mgul-rgyan-mu-tig-phreng-mdses*" (a beautiful necklace of pearls for a neck ornament of the learned).

There are yet several other grammatical works on the language of Tibet.

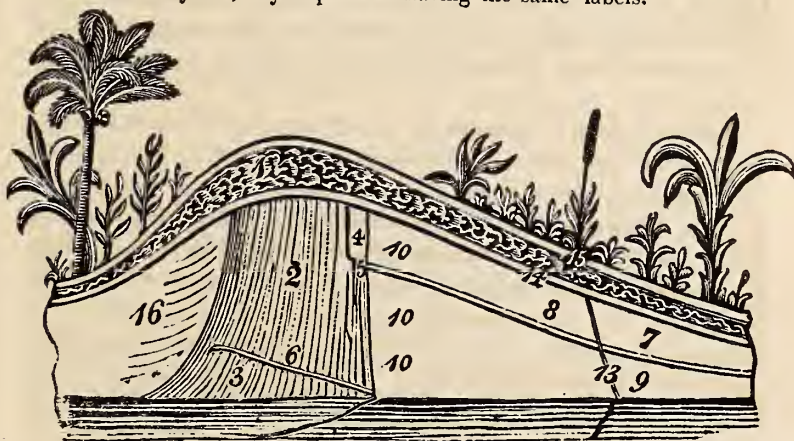
A. Cs.

VI.—*Section of a Hill in Cuttack supposed to be likely to contain Coal.* By M. KITTOE, Esq.

[In a letter addressed to J. McCLELLAND, Esq. Secretary Coal Committee.]

I have the pleasure to forward a sketch (section) of a hill called "*Newráj*," where I had expected to find coal, but have been unsuccessful ; the hill, however, presents such striking features, that I deem it worthy the notice of a geologist, and address you accordingly. I have forwarded specimens [a list of which is hereto annexed] to the Secretary of the Asiatic Society, who will deliver them to you for examination, after which I request the favour of your informing me whether or not coal is likely to be found beneath the very black slate, (marked K) ?

Also, whether it is likely to occur beneath the brown slate (J), in samples of which (obtained fourteen or fifteen feet below the surface at a village in a valley two miles inland south from *Newráj*;) I have found delicate veins of coal? Again, I should feel greatly obliged by your giving me instructions as to the nature of the rocks, beneath (or near to) which coal beds usually occur in this country? If there are any specimens available in the museum, I beg you will oblige me by forwarding some samples to me, labelled, and at the same time you will favour me with the names, &c. of the different specimens now forwarded, lettered as they are, my duplicates having the same labels.



A reply to the above at your earliest convenience will much oblige your most obedient servant.

Cuttack, Nov. 8, 1837.

(No. 1.) A. Laterite of Stirling, vide pp. 177-178, As. Res. volume, headed, on Orissa proper or Cuttack.

(2.) B. (3.) C. Upper courses of the rock just below the lower part of the rock next the water degenerating into clay.

(4.) E. (5.) F. Earth mixed with others of a yellowish hue like fuller's earth in taste and appearance, and resting between the black slate and the hard rock.

(6.) G. Vertical dyke between the rock and the slate imbedded in the fuller's earth.

A vein fusing through the hard rock at a right angle averaging 19 feet thick,

(7.) H. Yellow clay slate above the brown slate.

(8.) I. Brown slate, continuation of the black.

(9.) J. Pink slate, continuation of the brown.

(10.) K. Black slate of three kinds, the soft being the lowest.

(11.) L. Specimens of the vein which runs the whole length of the slate rocks, varying in color and thickness; average thickness 9 inches.

(12.) *M.* Piece found in the black slate.

(13.) *N.* Specimen of dyke (vertical) through the slate.

The other specimens forwarded are from *Mahánadí* and *Kutjooree*.

(1) Laterite, (2) speckled rock apparently volcanic, (3) ditto softer, (4) earth between the slate and rock, (5) dike of calcareous substance, (6) lava? (7) yellow clay slate, (8) brown slate, (9) pink slate, (10) black slate, (11) vein of various colors principally red, (13) dike through the slate, (14) marl between the rocks and the laterite, varying in thickness, (15) upper stratum of soil, (16) sandstone rock which continues for 50 or 60 miles towards *Ganjam*.

The above is merely a rough sketch to exhibit the different formations as exposed to view: the whole is without measurement. The extreme height of the hill is about 120 feet from the water level. Should it be required I shall be happy to make a more correct plan by actual measurement.

Newráj is about seven miles in a direct line (due west) from Cuttack; it is at this spot that the *Mahánadí* throwing off its branch called the *Kutjooree*, finally quits the hilly country and the great valley hence to *Burmool*. The natives look on this curious rock as the work of "SIVA" under the denomination of "*Siddh'swar*" to whom a temple (of great antiquity) is dedicated, and situated at the top of the rock, the lower story of it, as well as the enclosure or terraces are hewn out of the solid laterite rock, in which there are (besides) several caves, formerly inhabited by *rishis* (ascetics). The black rock is exported to *Poorree* for the purpose of making the "*tillak*," or frontal mark of the Hindus; the red, yellow, pink, &c. &c. are used to paint the houses in the vicinity. The sandstone does not come down to the water's edge but rests on the other rock at a short distance inland; indeed the rock washed by the river extends but a very short distance, when it joins on the range of coarse sandstone hillocks, which extend to the south towards the *Chilca* lake, including *Kandgirrī*, *Kūrdā*, &c. and across the *Mahánadí* from *Undharkot* on the bank, towards *Dakhannál* in a northerly direction; westerly, they extend as far as *Dhompáragarh* on the right bank, and *Barramba* on the left. The rock dipping and passing under the bed of the *Mahánadí*. Many valleys or basins are formed by these hills on both sides of the river; in some places the hillocks are but 30 or 40 feet high, the beds of sandstone being comparatively thin, of a coarse grain, resembling gritstone; it has numerous quartz pebbles of all sizes imbedded in it: it usually rests on shingle, and has a superstratum of the same kind; which again appears to rest on indurated clay slate.

Note.—By Dr. McClelland.

The hill of *Newráj* described by Mr. KITTOE in the accompanying letter, is situated seven miles in a direct line due west of *Cuttack* near the confluence of the *Kutjooree* with the *Mahánadi* at the exit of the latter from the hills; and appears from an examination of the small but interesting collection of specimens procured by Mr. KITTOE to be, as he has accurately described it, volcanic.

The centre of the hill is formed of a massive dyke (2,) thrown up from below, and consisting of a dark green trachyte of a somewhat coarse glossy character with minute vesicles containing a soft earthy matter, which is removed by exposure (6.) The lower portion of this rock (3), where it is exposed to the action of air and moisture, decays like green-stone, yielding a similar clay.

On one side of the dyke there is an abrupt abutment of sandstone (16), which forms an extensive undulating country on the west, south and north of *Newráj*; and on the other side a bed of drawing slate changing into yellow (7,) brown (8,) red (9,) and black chalks (10, 10, 10,) which might be used with advantage in the manufacture of paints and pencils. Mr. KITTOE indeed states, that the black drawing slate is exported to *Pooree* for the purpose of making the *tillak*, or frontal mark of the Hindus, and that the other kinds are used in the neighbourhood by the natives for painting their houses. I do not think that these chalks are at all inferior (especially the black) to the best kinds imported to England.

The annexed copy of Mr. KITTOE's sketch of the section of *Newráj* hill, I have made by using one of his rough geological specimens of black chalk instead of a pencil.

Between this last bed and the dyke, there is a true vein filled up apparently from above by scaly fragments of drawing slate and calcareous matter (5); this rent has evidently been formed in the centre of the hill by the elevation of the dyke from below, and some distance from this the slate is divided by a vein of a different nature (13) from the last, occasioned by the separation of the lower convex surface of the disturbed mass; this vein is composed of fragments of primary clay slate mechanically intermixed with plates of silvery mica, ingredients which must have been derived from below.

Another interesting peculiarity, and one for which it is more difficult to account in this section, is a vein of black glossy trachyte, extended obliquely from the drawing slate at the water's edge across the great dyke, dividing it nearly in a horizontal direction.

VII.—*Discovery of the name of ANTIOCHUS the Great, in two of the edicts of ASOKA, king of India.* By JAMES PRINSEP, Sec. &c.

[Read at the Meeting of the 7th March.]

As long as the study of Indian antiquities confines itself to the illustration of Indian history it must be confessed that it possesses little attraction for the general student, who is apt to regard the labour expended on the disentanglement of perplexing and contradictory mazes of fiction, as leading only to the substitution of vague and dry probabilities for poetical, albeit extravagant, fable. But the moment any name or event turns up in the course of such speculations offering a plausible point of connection between the legends of India and the rational histories of Greece or Rome,—a collision between the fortunes of an eastern and a western hero,—forthwith a speedy and spreading interest is excited which cannot be satisfied until the subject is thoroughly sifted by the examination of all the ancient works, western and eastern, that can throw concurrent light on the matter at issue. Such was the engrossing interest which attended the identification of *Sandracottus* with *Chandragupta* in the days of Sir WM. JONES: such the ardour with which the Sanskrit was studied, and is still studied, by philologists at home after it was discovered to bear an intimate relation to the classical languages of ancient Europe. Such more recently has been the curiosity excited, on Mr. TURNOUR's throwing open the hitherto sealed page of the Buddhist historians to the development of Indian monuments and Pauranic records.

The discovery I was myself so fortunate as to make, last year, of the alphabet of the *Delhi* pillar inscription, led immediately to results of hardly less consideration to the learned world. Dr. MILL regarded these inscriptions as *all but certainly demonstrated* relics of the classical periods of Indian literature. This slight remainder of doubt has been since removed by the identification of PIYADASI as ASOKA, which we also owe to Mr. TURNOUR's successful researches; and, dating from an epoch thus happily achieved, we have since succeeded in tracing the name of the grandson of the same king, DASARATHA, at *Gaya* in the same old character; and the names of NANDA and AI'LAS, and perhaps VIJAYA in the *Kalinga* caves: while on Bactrian coins we have been rewarded with finding the purely Greek names of AGATHOCLES and PANTALEON, faithfully rendered in the same ancient alphabet of the Hindus.

I have now to bring to the notice of the Society another link of the same chain of discovery, which will, if I do not deceive myself, create a

yet stronger degree of general interest in the labours, and of confidence in the deductions, of our antiquarian members than any that has preceded it. I feel it so impossible to keep this highly singular discovery to myself that I risk the imputation (which has been not unjustly cast upon me in the course of my late undigested disclosures) of bringing it forward in a very immature shape, and perhaps of hereafter being obliged to retract a portion of what I advance. Yet neither in this, nor in any former communication to the Society, have I to fear any material alteration in their general bearing, though improvements in reading and translation must of course be expected as I become more familiar with characters and dialects unknown for ages past even to the natives themselves, and entirely new to my own study.

A year ago, as the Society will remember, Mr. W. H. WATHEN, of *Bombay*, kindly sent me a reduced copy of the facsimiles of the inscriptions on a rock at *Girnar* (*Girinagara*) near *Junagarh* in *Gujerat*, which had been taken on cloth by the Rev. Dr. WILSON, president of the *Bombay* Literary Society. He also sent a copy to M. JACQUET of *Paris*, which I dare say before this has been turned to good account.

After completing the reading of the pillar inscriptions, my attention was naturally turned to these in the same character from the west of India, but I soon found that the copy sent was not sufficiently well done to be thoroughly made out; and I accordingly requested Mr. WILSON to favor me with the facsimile itself, which with the most liberal frankness he immediately sent round under a careful hand by sea. Meanwhile Lieut. KITTOE had, as you are also aware, made the important discovery of a long series of inscriptions in the same character at a place called *Dhauki*, in *Cuttack*. These were in so mutilated a state that I almost despaired of being able to sift their contents; and they were put aside, at any rate until the more promising portion of my labour should be accomplished.

I had just groped my way through the *Girnar* text, which proved to be, like that of the pillars, a series of edicts promulgated by ASOKA, but essentially different both in language and in purport; when I took up the *Cuttack* inscriptions of which Lieut. KITTOE had been engaged in making a lithographic copy for my journal. To my surprise and joy I discovered that the greater part of these inscriptions (all indeed save the first and last paragraphs which were enclosed in distinguishing frames), was identical with the inscription at *Girnar*! And thus as I had had five copies of the pillar inscription to collate together for a correct text, a most extraordinary chance had now thrown before me *two* copies of the rock edicts to aid me in a similar task! There was however

The same in Roman character, with the Dhauli copy interlined.*

Savata vijitemhi devánampiyasa Piyadasino raṇo, evama-
Savata vimitamsi devánampiyasa Piyadasine.....
 pápavantesu, yathá Choda, Piḍa, Satiyaputo, Ketaleputo,

 á-Tambapañṇi, ANTIYAKO YONA rájaye vāpi (tasa
 ANTIYOKE náma YONA lājaya vāpi (...sa
 ANTIYAKASA sámino rájáno), savata devánampiyasa Piya-
Antiyakasa sámantá lājáne) savata devánampiyasa Piya-
 dasino raṇo dwe chikíchhá katá ;—manusa chikíchhá cha pasu
dasine *chiki*.....
 chikíchhá cha : osudháni cha, yáni manusopagáni cha paso-
 *cha*..... *dháni áni muniso*..... *ni pasu*
 pagáni cha. Yata yata násti, savata párapítáni cha
opogánáni cha ata—tá nathi, sa..... *pálápitá*
 ropápitáni cha ; múláni cha phaláni cha ; yata yata násti,
lopapitá cha : mú...
 sayata hírapitáni cha ropápitáni cha. Pathesu kúpá
vata hálopitá cha, lopápitá cha. ma (gesu) udapanáni
 cha khánápitá ; vachhá cha ropapitá ; pari bhogáya
cha khánápitáni, lukháni cha lopapitáni paṭi bhogáya
 pasu manusánam.
p..... *ánam*.

Translation.

“ Everywhere within the conquered provinces of rája PIYADASI the beloved of the gods, as well as in the parts occupied by the faithful, such as *Chola, Piḍa, Satiyaputra*, and *Ketalaputra*, even as far as *Tambapañṇi (Ceylon)*—and moreover within the dominions of ANTIUCHUS the Greek, (of which ANTIUCHUS’ generals are the rulers,)—everywhere the heaven-beloved rája PIYADASI’S double system of medical aid is established ;—both medical aid for men, and medical aid for animals : together with medicaments of all sorts, which are suitable for men, and suitable for animals. And wherever there is not (such provision)—in all such places they are to be prepared, and to be planted : both root-drugs, and herbs, wheresoever there is not (a provision of them) in all such places shall they be deposited and planted.

And in the public highways wells are to be dug, and trees to be planted, for the accommodation of men and animals.”

* I reserve the lithographed facsimile until next month.

Many things are deserving of comment in this short edict. To begin in due order ;—

The opening words which are equally well preserved in both the *Girnar* and the *Dhauhi* inscriptions, will be remarked to differ, in the two examples, only in a single letter (disregarding of course the variation of the inflection, which we shall see by and by to be peculiar to the dialect of each place, and constant throughout) ;—the former text reads *Sarata vijitamhi* equivalent to the Sanskrit *saratra vijite*, ‘every where in the conquered (country)’ whereas the latter has *savata vimatansi* (S. *vimate*) throughout the inimical (in religion) country*. This difference is inconsiderable ; and both expressions will contrast equally well with *apāpavantesu* (S. *apāpavatsu*) ‘in the sinless-like,’ or ‘the provinces containing the believers.’ Of the places enumerated as belonging to the latter division, unfortunately one list only is preserved, and we are unable to identify any of their names with certainty, except the last. *Choda* may indeed be the *Chola* kingdom, and *Piḍu* the country named in the *Brahmanda Purāna*†, as *Pidika* in the same list with *Chūlica* : but in what part of India situated does not very clearly appear. *Satyapūto* and *Ketalaputo* are equally unknown ; unless the latter be *Ketorapuri* of WILFORD—*hod. Tahneswar*. The former seems rather an epithet of some ‘holy city’ of the time. Our only certain landmark then is *Tambapanni*, the ancient name of *Ceylon*, spelt exactly in the same manner as in the Pāli text of the *Mahāvamsa* just published by Mr. TURNOUR. The Greek name of this island, *Taprobane*, as Dr. MILL has elsewhere observed‡, seems rather to be taken from the Sanskrit *Tumra-pāni*, which is also the true *Singhalese* name for the same place.

But the principal fact which arrests attention in this very curious proclamation, is its allusion to ANTIOCHUS the *Yona*, (Sanskrit *Yavana*) or Greek, king. The name occurs four times over, with only one variation in the spelling, where in lieu of *Antiyako* we have *Antiyoko*, a still nearer approach to the Greek. The final *o* is the regular *Pali* conversion of the Sanskrit nominative masculine termination *as*, or the Greek *os*. In the pillar dialect the *visarga* of the Sanskrit is replaced by the vowel *e*, as we see in the interlined reading, *Antiyake*. Again the interposition of the semivowel *y* between the two Greek vowels *i* and *o*, is exactly what I had occasion to observe in the writing of the words *Agathuklayoj* and *Pantalawanta* for *Αγαθοκλεως* and *πανταλεοντος* on the coins. All this evidence would of itself bias my choice to—

* While correcting the press, I received a revision of the Cuttack inscription, by Mr. KITTOE, in which the word is plainly *vijitamsi*.

† As. Res. VIII. 336.

‡ Journal As. Soc. Vol. V. 830.

wards the reading adopted, even were it possible to propose any other; but although I have placed the sentence, exactly transcribed in the Devanāgarī character, in the pandit's hand; he could not, without the alteration of very many letters, convert it to any other meaning, however strained. And were there still any doubt at all in my mind, it would be removed by the testimony of the *Cuttack* version which introduces between *Antiyake* and *Yona* the word *nāma*,—making the precise sense ‘the Yona rāja by name ANTIOCHUS.’

Having then, I trust, established the existence of a genuine Greek name in an authentic Indian edict, let us turn to the histories of the period and ascertain who he may be, and how far the circumstance tallies with the Grecian and Persian records of these ancient times.

The age of ASOKA, as fixed by the Buddhist annals falls close after the invasion of ALEXANDER the Great, but when adjusted by the established epoch of CHANDRAGUPTA, it coalesces with the flourishing period of Bactrian independence.

The name of ANTIOCHUS occurs solely in the Seleucidan dynasty which enjoyed supremacy over the whole extent of the Macedonian conquests, until the satraps of Persia and higher Asia threw off the Syrian yoke, and assumed to themselves the regal title. It was to re-establish his sway over the revolted provinces that ANTIOCHUS the Great in the third century before Christ, conducted an extended campaign in *Bactria*, which ended in an accommodation with EUTHYDEMUS whereby he was permitted to hold the regal title. The Bactrian king consented probably to be tributary to ANTIOCHUS, for the treaty was ratified by the surrender of all EUTHYDEMUS' elephants to ANTIOCHUS; who, on his side, cemented the alliance by granting his daughter in marriage to the handsome DEMETRIUS, EUTHYDEMUS's son. This memorable event is fixed by BAYER in the year 205 B. C.

“In the reign of ANTIOCHUS the Great,” says MAURICE, “the affairs of India again become conspicuously prominent in the page of Asiatic history.” POLYBIUS informs us that subsequently to the settlement of *Bactria*, this monarch led his army over the Indian Caucasus, and entered India, where he paid a visit to, and *renewed his alliance** with SOPHAGASENES, king of that country, and received likewise his elephants, which with those he had from EUTHYDEMUS amounted now

* The treaty thus *renewed*, may have been that entered into between SELEUCUS and SANDRACOTTUS. Alluding to the obscure origin of this prince JUSTINUS says, “By such a tenure of rule was it that SANDRACOTTUS acquired India at the time SELEUCUS was laying the foundations of his future greatness, and the latter *having concluded a league with him*, and settled his affairs in the east came down and joined the war against ANTIGONUS.” L. XV. C. 4.

to a hundred and fifty*; he then recrossed the *Indus* and returned homeward through *Arachosia*, *Drangiana*, and *Carmania*, settling in all those countries due order and discipline. "The boldness of his attempts and the wisdom of his conduct during the whole course of this long war, gained him the reputation of a wise and valiant prince, so that his name became formidable to all Europe as well as Asia, and well deserved the addition of 'Great' which was given him†."

In all, save the name of the Indian monarch, do these circumstances agree with the terms of our inscription. We may readily imagine it to have been a provision in the treaty, that the Buddhist king of India should be allowed to establish his religious and humane regulations among those of the same faith who resided under the rule of *ANTIOCHUS'* generals, that is, in *Bactria* and perhaps *Sinde*. We see an acknowledgment of fealty to him in the very wording of the sentence, and it is curious that, while the *Cuttack* inscription calls the Greek princes, *Sámantá* his generals—the other edict names them *Swámino* ‡, 'lords.'

With regard to the name of *Sophagasena* I should not have much hesitation in asserting that it was a palpable corruption of *Asoka sinha* or *sena*, the first two syllables transposed§,—but that I am saved the trouble by that more daring etymologist Col. WILFORD, who long ago pronounced *Sophagasena* to be nothing more than *Sivaca-sena*, a term equivalent to *Asoca-sena*, 'one whose army is clement,'—and which was another name for *ASOCA-VERDDHANA* the third in descent from *CHANDRAGUPTA* in the Pauranic lists ||.

Mr. TURNOUR fixes the date of *ASOKA'S* accession in B. C. 247, or 62 years subsequent to *CHANDRAGUPTA*, the cotemporary of *SELEUCUS*. Many of his edicts are dated in his 28th year, that is in B. C. 219, or six years after *ANTIOCHUS* the Great had mounted the throne. The medical edict is not absolutely dated; we however perceive that there can be no positive anachronism to oppose the conclusions to which other powerful considerations would lead.

* The words of *POLYBIUS* are:—"ὑπερβαλὼνδε τον Καύκασον, και κατάρas εἰς την Ἰνδικήν, τήν του φιλιαν ἀνεκείσαστο τήν προς Σοφαγασήνον τον βασιλέα των Ἰνδῶν, καί λαβὼν ἐλέφαντας, ὥσε γενέσθαι τοὺς ἅπαντας εἰς ἑκατὸν καὶ πεντήκοντα, ἔτι δε σιτομετρήσας πάλιν ενταῦθα τήν δύναμιν, αὐτὸς μὲν ἀνέξενε μετὰ της σρατίας. Ἀνδρoσθένη δε τον Κυζικηνὸν ἐπὶ τῆς ἀνακομιδῆς ἀπέλιπε τῆς γαζης, τα ὁμολογηθείσης αὐτῷ παρὰ τοῦ βασιλέως. Pol. Histor. lib. xi.

† Universal History, vol. VIII, p. 157.

‡ The last letter is however doubtful (more resembling *pham*) and I feel very certain that re-examination will prove the reading to be *Sámantá*.

§ Just as the natives persist in calling *OCHTERLONY*, *Loni-akter*;—many such whimsical perversions might be quoted.

|| Asiatic Researches, V. 286.

But the subject of elucidation is not exhausted here. The Persian historians have yet to be examined; and their account of this eventful period may be gathered, from FERISHTA's words, to have been copied not from the Greeks, but from native authorities now no longer extant.

"SINSARCHAND* assumed the imperial dignity after the death of PHOOR, and in a short time regulated the discomposed concerns of the empire. He neglected not in the mean time to remit the customary tribute to the *Grecian captains*, who possessed Persia under and after the death of ALEXANDER. SINSARCHAND and his son possessed the empire of India *seventy years*. When the grandson of SINSARCHAND acceded to the throne, a prince named JONA, who is said to have been a grand nephew of PHOOR, though that circumstance is not well attested, aspiring to the throne, rose in arms against the reigning prince and deposed him†."

* MAURICE's Modern Hindustan, vol. I. 65—*Sinsár-chand* is just as much of a Sanskrit name as CHANDRAGUPTA, and nearly of the same import; viz. संसारचन्द्र *Sansára-chandra*, 'moon of the world.'

† The whole passage in Ferishta is not too long to be extracted, that it may be consulted in the original. The Society's copy however differs from that translated in the above quotation from Maurice in the substitution of other names for those of the *Greek captains*.

سنسار چند نامی زمام حکومت هندوستان بکف آورده در اندک مدتی تمام هند و ستان را که برهم خورده بود مصفا ساخت و چون کشته شدن فور را بچشم خود مشاهده نموده بود از ترس هر ساله پیشکش پیش از طلب برای کودرز و ترسی که دران ایام سلطنت ایران داشتند میفرستاد و بعد از آنکه هفتاد سال از سلطنتش سپری شده بود جوته نامی خروج کرده استیلا یافت *

خروج راجه جوته بعضی برافند که جوته خواهر زاده فور است چون بر تخت برآمد افعال حمید و خصال پسندیده ظاهر گردانید و در معنای مملکت کوشیده در کنار بحر گدگ و جمعه قریات و قصبات احداث فرمود و در عدل داد سعی بلیغ بجا آورد و به اردشیر بابکان معاصر بود سالی که اردشیر قصد تسخیر هند نموده تا حوالی سرهند آمد جوته مضطرب گشته بخدمت وی شتافت و زرو جواهر بسیار وفیلان ازدها کرد از پیشکش کرده بر گردانید و خود بقزوج برگشته مدتها بر بستر استراحت تکیه داشت بعد از نود سال رخت هستی بر بستر بیست و دو پسر از وی ماند و ادیکر کلیان چند جانشین شد *

ARDESHER BABEGA'N, began to reign A. D. 223. There is an anachronism therefore of near 500 years in this account! The name of KALIANCHAND is

Now it is not by any means improbable that the JONA (or *Yona*) here introduced as a rival to ASOKA, may be the identical *Yona rāja*, mentioned in the edict before us, or in other words, ANTIOCHUS himself; although it is certainly true that the Persian historian goes on to give a circumstantial account of his reigning at *Canouj* for a long time, with indefatigable attention to the police of the country and the peopling and cultivation of the waste tracts of Hindustan! YONA is placed 260 years before CHRIST, and is stated to have made a present of elephants and a vast quantity of gold and jewels to ARDESHIR, who claimed tribute from the empire of India. This seems to be, *mutato nomine*, a repetition of the story given by POLYBIUS, for, independently of the anachronism, it is hardly probable that the Arsacidæ, themselves tributary to *Syria*, should have yet mustered courage to exact the like respect from their powerful neighbours.

I think the edict furnishes a satisfactory solution of the difficulty, by enabling us to erase *Yona* from the Indian list, and to transfer him either to *Syria* or to some principality of the Bactrian Greeks who are acknowledged to have held sway in the upper part of India.

As for the Pauranic histories of the Hindus, all I need say is, that if any thing can tend to persuade the brahmanical pandits of the erroneous basis on which their chronology rests, and the necessity of seeking its explanation (which I do not deem at all impossible) it will be this discovery of a coincidence between our histories and these sculptured monuments in their own language, which cannot have been tampered with, and cannot be suspected of giving false testimony on such a matter.

The best accounts however of the early occurrences of Indian history are to be sought in the Buddhist annals. Let us see what light they throw on the term *Yona*.

In Mr. TURNOUR's introduction to the *Mahāwanso* (which I have only this moment seen through the kindness of Dr. BLAND of the Wolf) I find these words: "In regard to the geographical identification of the *Yona* country, I am of opinion that we shall have to abandon past speculations on the similarity of the names "*Yona*" and "*Yavana*," and the consequent inference that the *Yavanas* were the Greeks of Bactriana;—as *yona* is stated to be mentioned long anterior to ALEXANDER's invasion in the ancient Pāli works. The term in that case can have no connection with the Greeks." Now on turning to the only two passages indicated in the glossary; I find that the first relates to the unknown in the *Puranas*:—neither are *Koderz* and *Terast*, known as kings of Persia of that period. The former resembles much the *Kodes* of our Bactrian coins: the latter may be *Tiridates* (B. C. 253).

deputation by ASOKA himself of a missionary named MAHA'RAKKHITO to effect the conversion of the *Yona* country, while MAJJHANTIKO goes to *Kásmira* and *Gandhára*, and others to various places.

The other passage cited (page 171) occurs in an elaborate and most circumstantial account of the erection of the *Maháthupa*, or great tope, at *Ruanwelli*, by DUTTHAGAMINI king of *Ceylon*, in the year 157 B. C. Among the priests who resort to *Ceylon* to assist at its consecration are the following from Upper India—for the passage is so interesting to us Indians who are nearly in the dark as to those periods, that I cannot refrain from extracting it entire :

“*Nánadesápi aganchhun bahawó bhikkhawó idha :
Idhadipaṭṭhasanghassu kákatháwa idhágama ?
Therásiti sahasasáni bhikkhú ádāya ágamá
Rájághassa sámantá Indagutto mahágani.
Sahasasáni Isipataná Bhikkhunaṃ dwádasādyá
Dhammaseno maháthéro chetiyaṭṭhānamágamá.
Sattḥin bhikkhusahasasáni ádāya iddhamágama
Piṇḍadassi maháthéro Jetarāmaṃwihárató.
Wesálimaháwanato théroru Buddharakkhito
Atthásasahasasáni bhikkhu ádāya ágamá.
Kosambighositarámo théroru dhammarakkhito
Tinsa bhikkhusahasasáni ádāya idhamágamá.
Ádāya Yujjeniyā théro Dakkhinagiritó
Yati chattiárisahasasáni ágoru Dhammarakkhito
Bhikkhunaṃ satasahasasánaṃ sattḥi-sahasasáni chádiya.
Pupphapure sákáramá thero mittinnanámako.
Duwe satasahasasáni sahasasáni cha sattḥicha,
Bhikkhu Pallawabhogamhá mahádevo mahámati.
Yónanaggar álasanna Yona mahádhhammarakkhito
Théro sattḥisahasasáni bhikkhu ádāya ágamá.
Winjá tawwatániyá senásanútu uttaro.
Thero sattḥi sahasasáni bhikkhu ádāya ágamá.
Chittagutto maháthéro Bodhimāṇḍa wihárató
Tinsa bhikkhusahasasáni ádiyitwá idhágamá.
Chandagutto maháthéro wanawásapadesato,
A'gásiti sahasasáni ádiyitwá yati idha.
Suriyagutto maháthéro kélásamaháwihárató
Chhanawati sahasasáni bhikkhu ádāya ágamá.”*

“ From various foreign countries many priests repaired thither. Who will be able to render an account of the priests of the island who assembled here? The profound teacher INDAGUTTO, a sojourner in the vicinity of *Rájagruha*, attended, accompanied by eight thousand theros. The mahá théro DHAMMASENO, bringing with him twelve thousand from the fraternity of the *Isipattana* temple (near *Bárānesi*), repaired to the site of the *thúpo*. The mahá théro PIYADASSI from the *jeto wiháro* (near *Sáwatthipura*) attended, bringing with him sixty thousand priests. The théro BUDDHARAKKHITO attended from the *Maháwanno wiháro* of *Wésali*, bringing eight thousand priests. The chief théro DHAMMARAKKHITO, attended from the *Ghositá* temple of *Kósambú*, bringing thirty thousand priests with him. The chief théro DHAMMARAKKHITO, bringing forty thousand disciples from *Dakkhinágiri* temple of *Ujjéni*, also attended. The théro named MITTINNO, bringing sixty thousand priests from his fraternity of one hundred thousand at the *Asóko* temple at *Pupphapura*. The théro RETINNO, bringing from the *Kásmira* country two hundred and eighty thousand priests. The great sage MAHADEWO with fourteen laes and sixty thousand priests from *Pallawabhágo*; and mahá DHAMMARAKKHITO, théro of *Yona*, accompanied by thirty thousand priests from the vicinity of *A'lasaddá*, the capital of the *Yóna* country, attended. The théro UTTARO attended accompanied by sixty thousand priests from the *Uttania* temple in the wilderness of *Winjá*. The mahá théro CHITTAGUTTO repaired hither, attended by thirty thousand priests from the *Boddhimando*. The mahá théro CHANDAGUTTO repaired hither, attended by eighty thousand priests from the *Wanawásó* country. The mahá théro SURIAGUTTO attended, accompanied by ninety-six thousand priests from the *Kélaso wiháro*.”

‘The vicinity of *A’lasaddá* (in the text *A’lasanná*, but corrected in the errata) the capital of the *Yona* country’—follows, in this enumeration, the mention of *Kásmir*, while it precedes the wilderness of *Vinjha* which is evidently *Vindravan*, the modern *Bindrabund*. In situation then as well as in date I see nothing here to oppose the understanding of *Yona* as the Greek dominion of *Bactria* and the *Panjáb*, and I dare even further propose that the name of the capital near which the Buddhist monastery was situated, and which Mr. TURNOUR states in his glossary to be unidentified, is merely a corruption of *Alexandria*, the right reading being perhaps *A’lasanda*, halfway between the authorities of the Páli ‘*variorum*.’ Thus in lieu of finding any difficulty in regard to the use of the term *Yona* by oriental authors, we perceive them all rather to admit the interpretation which the sagacity of our antiquarians had long since suggested, but which could only be thoroughly confirmed by such an incontrovertible testimony as it has now fallen to my lot to bring to notice. The particular *Alexandria* alluded to may probably be that *ad calcem Caucasi* which is placed at *Beghram* by Mr. MASSON in the 5th volume of my Journal, and in the neighbourhood of which so many stupendous *stupas* have been brought to light through his able investigations.

The purport of the edict thus promulgated to the subjects of the Indian monarch and of his Greek ally, now merits a few observations.

I have said that its object was to establish a system of medical administration. The word *chikichha* is the regular Páli form of the Sanskrit *chikitsa* (चिकित्सा), the administration of medicine, or healing. In fact a medical service seems to have been instituted and supported at the expense of the state, with depôts of the herbs and drugs then, and still, used as remedies by Indian practitioners. The term *osudháni*, (Sans. *aushadháni* औषधानि,) according to WILSON, may even comprehend mineral as well as vegetable medicaments, and it may possibly be thus used in contradistinction to *mulóni* and *phalíní*.

In reading the particular allusion to a *separate* system of treatment for animals, one is reminded of that remarkable institution at *Surat* usually called the Banyan hospital, which has been so frequently described by European visitors of the last century. If proper inquiry were directed to this building, I dare say it would be discovered to be a living example, (the only one that has braved twenty centuries,)—of the humane acts of ASOKA, recorded at no great distance on a rock in *Gujerat*.—“This hospital consisted of a large piece of ground enclosed by high walls and subdivided into several courts or wards for the accommodation of animals. In sickness they

were attended with the greatest care, and here found a peaceful asylum for the infirmities of old age. When an animal broke a limb or was otherwise disabled, his owner brought him to this hospital, where he was received *without regard to the caste or nation of his master*. In 1772, it contained horses, mules, oxen, sheep, goats, monkeys, poultry, pigeons, and a variety of birds, also an aged tortoise which was known to have been there 75 years. The most extraordinary ward was that appropriated for rats, mice, bugs, and other noxious vermin, for whom suitable food was provided." (*Ham. Hindostan*, I. 718.)

The order for digging wells and planting trees along the sides of the high roads in this edict, is of a similar nature with, but rather more laconic than that on the Ferôz l  th, which it may be remembered, specified that the wells were to be half a coss apart, and the trees to be of the mango species: besides which there were to be serais and villages—a provision which seems pointed at in the passage quoted from FERISHTA, about SINSARCHAND'S successor "establishing towns and villages along the *Ganges* and *Jumna*."

The word used for wells at *Girmar* is *kup  *, pure Sanskrit:—at *Dhaoli* it is *udapan  ni* as on the pillars,—and so for road, one uses *patha*,—the other *maga* (*S. marga*) as on the pillars;—and in the same manner one dialect employs *manusdnam* the other *munis  nam*, 'of men;' but of this and other idiomatical peculiarities I shall hereafter have more to say when I shall have presented the remainder of these most interesting relics of antiquity to the Society's notice; fearing that I have almost transgressed the bounds of their patience in the observations to which I have been led by the one selected for my theme on the present occasion.

VIII.—Proceedings of the Asiatic Society.

Wednesday evening, the 7th Feb. 1838.

The Hon'ble Sir EDWARD RYAN, President, in the chair.

CHARLES FRASER, Esq., M. C. OMMANEY, Esq., Dr. W. H. GREEN, and Lieut. A. BIGGE, Asst. to the Gov. Genl.'s Agent in *Assam*, proposed at the last meeting were ballotted for and duly elected members of the Society.

Dr. HENRY HARPUR SPRY, was proposed by Col. McLEOD, seconded by the Secretary.

Read a letter from Capt. ROBERT SHORTEDE, Acting Secretary of the Bombay Branch of the Royal Asiatic Society, acknowledging the receipt of the 3rd volume of the *Mah  bh  rata*.

Also, a letter from MANSUR AHMED, thanking the Society for the copy of *Khazanat ul Ilm*, presented to him for having edited that work gratuitously to its completion, but declining the other copies offered him and requesting in lieu thereof, such volumes of the *Alemgiri* series as could be spared. *Resolved* to present him with the 3rd, 4th, 5th and last volumes.

Library.

Read a letter from M. E. DOLLFUS, President of Société Industrielle of Mulhausen in Alsace, forwarding for presentation the following books, and soliciting an exchange of publications with the Society.

Bulletin de la Société Industrielle de Mulhausen, vol. X.

Exposition des produits de l'Industrie Alsacienne organisée par la Société Industrielle de Mulhausen—for May 1836.

Rapport Annuel for 1836-37.

The following books were also presented.

Wellesley Dispatches, vol. V—presented by the Hon'ble Government of India.

An account of the manufacture of the black tea as now practised at Sadiya in Upper Assam, by G. A. BRUCE, Superintendent of tea culture—by the Tea Committee, through Dr. N. Wallich.

The Pooránic, Siddhantic and Cœpernican systems of the world compared; by SOOBAJEE BAPPOO of Lehere near Bhopal, in Malwa, printed in Telinga at Madras—presented by L. WILKINSON, Esq.

Indian Journal of Medical and Physical Science, for March 1833—by the Editor.

Resala Aruza Farsi, by SYED KERAMUT ALI—by the Author.

Tasfrul Osûl, by MAULAVI ABDUL MOJID—by the Author.

Meteorological Register, for January 1838—by the Surveyor General.

Antiquities.

Capt. A. CUNNINGHAM forwarded impressions of inscriptions from the neighbourhood of *Juanpoor*.

Capt. W. BROWN, forwarded a notice, and drawings of the ancient pillar, at *Hissâr*.

[We shall hasten to insert this note, but the remains of letters on the lower part of the shaft, do not appear sufficiently well defined to be pronounced of the Asoka alphabet.]

The Secretary submitted the following question addressed to himself by a friend under the signature *Vidyârthi*, to the critical solution of the native members of the Society.

SIR,

I shall feel obliged if you or any of your readers will enlighten me on a point regarding which I am in doubt. I have observed, that in MOORE'S Hindu Pantheon and in several papers in the Asiatic Researches treating of Hindu Mythology, the bull, which is the vehicle of SHIVA, is styled "*Nandi*;" and the correctness of this appellation seems to be maintained by you in your No. 67, for July last, in a paper (No. VI.) on certain ancient inscriptions (vide page 590. Note 4.) Now I have searched in vain in both editions of "WILSON'S Sanskrit Dictionary," in RADHA KANT DEB'S Encyclopedian Sanskrit Dictionary, the "*Shabda Kalpadruma*," in CAREY'S Bengallee Dictionary, and in "WARD'S Hindoos," for proofs that the bull of SHIVA is called "*Nandi*." I wish therefore to know what authority there is for such an application of this term?

Calcutta, March 3rd, 1838.

The Secretary read a paper on the discovery of a notice of *Antiochus the Great* in two of the edicts of ASOKA.

[This paper is printed in the present Journal.]

Physical.

Two fresh fragments of fossil testudo from the fort boring were presented by Col. McLEOD, brought up from a depth of 450 feet.

A description of *Balwa Kund*, *Chittagaon*, was forwarded by Lieut. G. SIDONS, Engineers.

A report on Caoutchouc, by Dr. W. GRIFFITH, was communicated by Government through the Gen. Dept.

[Printed in the present number.]

Various minerals and coal fossils were presented on the part of L. PLAYFAIR, Esq. through Mr. BIGNELL.

A third despatch consisting of 163 specimens of birds, and 7 animals was received from Capt. PEMBERTON, for deposit in the Society's charge.

Mr. J. P. GRANT presented for the museum eight birds and one animal in the name of Mr. CHARLES GRANT, C. S. at the Cape of Good Hope.

Mr. D. ROSS, a bird (*otis delicosa*) mounted by M. BOUCHEZ.

Also a black-headed gull, was presented by M. X. NICOLAS.

The following announcement of two new sites of coal in *Assam* was communicated by Dr. McCLELLAND, Secretary of the Coal Committee.

TO CAPTAIN HENDERSON,
Member of Coal and Iron Committee, Calcutta.

SIR,

I beg to acquaint you for the information of the Committee that in a recent visit to the south-east frontier of the valley, I inspected beds of coal in two places, first at *Borhath* and then near *Jeypore*.

2. The first bed at the former place that I met with, was in the channel of the *Disang* river about a mile above the little village of *Borhath* and at the commencement of the rising ground of the first low range of the *Naga* hills. The bed was visible for about a hundred yards in length and about eight feet in thickness above the level of the water and gravel of the stream; it was immediately covered by a stratum of loose rubble four or five feet deep, over which was the superficial layer of soil of about the same depth that forms the surface of the surrounding place. The bed was apparently horizontal, for a part of it was visible in the opposite bank of the river at the same level.

3. Ascending the bank and proceeding up a gentle rise about a quarter of a mile, at an elevation of probably 50 or 60 feet, I came again upon a vein of coal in the banks of a little watercourse and traced it for about 200 yards. It was not here visible in extensive continuance, masses being overlaid here and there with the fallen rubbish of the acclivity above, but it cropped out at intervals and always seemed to bear a thickness of several feet. From beneath this bed several small springs of petroleum flow into the pools in the watercourse, and four or five seers (10 lbs.) of this oil were collected by my servants from their surfaces in a few minutes.

4. The coal in both these strata appeared to be of the first quality, and nothing could well be more favorable than the position for facilitating the working, nor for the transport of the coal as far as the waters of the *Disang* admit, but this stream is barely navigable for laden canoes of small size in the dry weather, although in the rains it has a depth of water sufficient for large boats, and its stream is no where impetuous.

5. The other bed of coal was similarly situated at the foot of the eastern side of the same hills, about 12 miles from *Bhorath*, about 3 miles inland from the *Dehing* river, and the village of *Jeypore*. This coal is also accompanied by petroleum springs and appears to be of exactly the same quality as that first mentioned.

6. Captain HANNAY is now engaged in quarrying some of this coal, agreeably to instructions from the Right Honorable the Governor General, and I hope soon to be able to send a small quantity of it to the Presidency. He was not aware of the existence of the *Borhath* coal, the superior facilities of transport offered by which would otherwise have induced him probably to have worked it in preference, but he could not so well have superintended the labourers, the road between *Jeypore* and *Borhath* being in an extremely bad state and scarcely passable after rain.

7. Although no other traces of coal have as yet been discovered in the immediate vicinity of either *Jeypore* or *Borhath* than the beds now noticed, it is impossible not to come to the conclusion, from what has been brought to light by previous discoveries above and below, and from the general conformity of the geology of the whole tract, that a most extensive bed of coal underlies all the small range of *Naga* hills on this frontier for an extent of perhaps upwards of 100 miles.

8. Along this great extent we may hereafter find beds extending far lower down towards the great navigable channel of the *Brahmaputra*, and therefore apparently offering some advantages in regard to transport, but as these advantages will be counterbalanced by greater difficulty in drainage it seems to me that we are not likely in all *Upper Assam* to find any two points where coal could be worked to more advantage than those now noticed, viz. *Borhath* and *Jeypore*, with reference particularly to the nature of the streams which traverse this bank; for, these receiving no tributaries of the least consequence after leaving the hills, they in themselves are as fitted for navigation close to the hills as in any part of their courses, whilst a little longer navigation is of little or no consequence, and the *Dehing* and *Disang* are the largest streams on the south bank.

9. If therefore the sample of coal to be sent down should turn out favorable in regard to cost, the committee need not I think hesitate working these seams, looking to the discovery of further beds better situated. I greatly fear however the present lamentable desolation of this part of the country and the inefficient management to which it has been entrusted may oppose most formidable obstacles to working the coal on any scale and with any economy. In the hills there is indeed a sufficient population of *Nagas* for any works, and the tribes in this neighbourhood are in great measure civilized and would willingly take employment under us, were they free to choose; but they are all now engaged in the *rāja's* salt works in the vicinity, and I apprehend they are not at liberty to leave them.

10. In therefore the existing deserted state of the country and under the mistaken policy of its ruler, I fear Captain HANNAY will not be successful in showing that the coal can be worked to advantage, and the great mineral wealth of Upper Assam will therefore not be for the present available to the state.

Govr. Genl. Agent's Office, }
Jorehath Ghal, 19th Feb. 1833. }

I have the honor to be, &c. &c,

R. JENKINS,
Agent to the Govr. Genl.

Specimens of coal and accompanying minerals from the neighbourhood of Hazáribágh, were also presented by the same gentlemen on the part of Dr. A. DRUMMOND.

The following is extracted from Mr. DRUMMOND's report to the Medical Board on the subject :

"Although I am fully impressed with the belief that Hazáribágh is a coal district, it yet seems obvious, that no confirmation of such an opinion is likely to be obtained till the ground has been opened to an extent sufficient for ascertaining the point by actual examination.

"It cannot therefore be certainly averred that coal exists at the places indicated whence the minerals were taken, although such a supposition is highly probable.

"It is moreover strongly corroborated by other evidence. Coal is found in large quantity to the south-east of Hazáribágh at several places. The principal of these is called *Lugupuhar* about 24 miles distant, whence a considerable quantity was brought last year and sold at Hazáribágh, four maunds for the rupee. The approach to it is however, highly dangerous, being situated in a jungal so extremely dense, that tigers, hyenas, and other wild animals are in great abundance. Even at *Minkundunge* a hill about three miles south-east of Hazáribágh, where I was searching for lead and antimony ores reported to exist there, I was informed by the villagers, that they had killed a tiger only eight days previous. I need therefore hardly observe that a guard on such occasions is almost indispensable.

"The other places where coal is found are called *Ruhana*, *Eechauk*, not *Eeechauk*, and *Luhio* being also to the south-east and nearly equidistant with *Lugupuhar*.

"I have not yet examined the strata in either of the above named places for the reasons just assigned, but it is my intention to proceed thither by dak in a few days, more particularly on account of fossils, of which I have not yet discovered any remains, and no traces whatever of marine testacea or vegetables.

"The discoveries of coal-beds made by the natives are more to be attributed to chance, than to any ideas they entertain of coal being concealed under ground in the vicinity of any particular strata. Those which have been discovered to the south-east were laid bare by the gradual operation of mountain torrents and other natural causes. Artificial means however, only can avail for the discovery of others, which, from their situation are but little affected by fluctuations of weather and might in the usual course require centuries even for their development. I now proceed to the specimens forwarded, and begin with

Series 1st.

"These specimens were taken from an excavation in an elevated portion of land about one and a half miles south from Hazáribágh at the depth of about 80 or 100 feet below the original surface. The soil has been extensively broken up by successive rainy seasons, and being skirted by a small river or nullah; to which the descent is sudden, currents and torrents probably have been principally instrumental in causing the disruption in the surface alluded to.

"The superior stratum of the original soil is about eight feet deep, of a red color, and consists of clay, sand, and gravel, with small fragments of mica intermixed, much more abundant however in the

"Supermedial stratum, just underlying the red soil, being occasionally of a blackish or blue aspect. This stratum consists of fragments of quartz and conglomerate, siliceous and calcareous earths, variously disposed and alternating sometimes with other earths. White sandstone is very abundant, being evidently decayed quartz, with mica and lime combined, having a laminated texture, in some cases easily crumbled according to its state of decay. This order appears to terminate in the carboniferous group is my belief from specimen No. 1, which seems to be coal imbedded in quartz. The coal however, is not only deprived of its bitumen, but obviously contains an excess of earthy matter; and to the absence of the one, and presence of the other is probably owing its unflammability. Exposure to the air may have contributed to its decomposition, and subsequent deprivation of bitumen as in the first instance, while the presence of earthy matter, may be assigned to the usual causes. The specimen was dug out as nearly as possible in its present state, the dark side being uppermost.

" Specimen 2 contains fragments found in great abundance in the vicinity of No. 1, having also undergone a like decomposition.

" Specimens 3, 4, and 5, alternate in the same bed with the former: specimen 6 being a species of oolite, (?) also from the surrounding strata.

Series 2nd.

" These specimens were taken from a ravine about 2 miles north-east from *Hazáribágh*, my belief of the existence of coal, in which, has been chiefly influenced by the iron stone, (as in specimen No. 1,) which it contains in great abundance. It alternates with the other specimens more or less near according to their numbers. No. 10, however is a rare specimen. The ravine is situated near a granite hill, and owes its formation to the same causes though acting in a less degree, which have been already adduced as subsidiary in forming the others, or even primeval.

" The packet lettered A is a specimen of coal from *Lugupuhar*, the specimen lettered B is from *Luhio*, and was taken from the dried bed of a river, of which the distance is about 20 miles south-east of *Hazáribágh*. There are three species of coal found at the latter place, but B is the only one I have as yet procured. Having lately visited *Kueylee* or *Kuindree Ghat*, about 14 miles north-west from *Hazáribágh* previously unvisited by any European, I obtained some curious crystalline specimens of limestone and silix, of which specimen C gives the prevailing character. Specimen D was taken from an immense block of the prevailing rock of which it is characteristic.

" The *Ghat* is situated in a jangal so dense that two paces in front, a man was employed to part bushes and grass, to allow my palkee (above which the grass reached several feet) to proceed: even this mode at length was unavailing. I shall defer a more particular account however of this place, till I shall have ascertained the result of my present communication."

The following extract of a letter from Dr. HELFER to Mr. BLUNDELL, *Tavoy*, 15th February 1838, was communicated by that gentleman through Mr. Secretary MANGLES. The specimens of ore, &c. had not reached *Calcutta*.

" Before I leave this place, I of course make a report up about all what has been hitherto done. I have been very diligent since my last letter: I have made one great excursion towards the east crossing over the Tenasserim river to the other side of the 'supposed' boundary. My chief aim was the examination of the tin mines, and I am greatly satisfied with them. They are very productive and very extensive—only because the people do not understand to work them, and because no European, who understands it, knows of them, they lie waste. But on a large scale worked beginning with a capital of say twenty thousand rupees, one could become soon a Millionaire."

The whole country near the sea coast is abounding in capital iron ores, but the best of all is one hour from *Tavoy*. You have probably heard that loadstone has been found there; well without knowing this when approaching *Tavoy*, I found close to it or rather part of it a hill entirely composed of the very best specular iron ore*. I visited since that time the place a second time to ascertain its quantity, and found that it is unlimited.

I am of opinion, that you may work this place not waiting for coal, nay I think that charcoal is even cheaper. The place is only 25 minutes from the banks of the *Tavoy* river, leading through paddy fields. If you get dug a canal by a parcel of convicts through these fields on four feet broad, you have all done that is required. Close to the banks you set up your iron foundry. Wood carried down from the banks of the upper *Tavoy* river, is converted in loco into charcoal, and if cut down only on the banks and thrown into the water will be indeed cheaper than any other fuel. Vessels of a hundred tons burthen can approach the same banks, and carry the pig iron, to any part of the world you like. Respecting situation I think there is no place in the world so admirably situated, and a better quality you will find nowhere.

I send some boxes with collections. As I do not return before the monsoon, I would very much beg to have every thing soldered up, except the stone, otherwise all the great trouble of collecting would be useless.

I start from here to-morrow towards *Mergui*,—I intend to visit at first *Taunbiauk* and the *Kiauktaun*, afterwards *Pali*, from whence I wish to cross over to the *Tenasserim*, to visit the sapan wood forests, and to go down that river to *Mergui*.

No coal yet, but I am promised to get it in *Pali*. I have some hopes to find some gold in the lower parts. If I have coal and gold, then you are content I know.

* I have a fine specimen of a similar ore from an island south of *Penang* stated to be entirely composed of it.—ED.

Meteorological Register, kept at the Assay Office, Calcutta, for the Month of February, 1838.

Day of the Month.	Observations at 10 A. M.						Observations at 4 P. M.						Calculated Humidity.		Temperature of water.		Rain.	Wind.	Weather.			
	Old Stand. Barometer at 32°.	New Stand. Barometer reduced.	Thermome- ter in air.	Depression of wet-bulb.	Do. by Les- lie's Hygro.	Dew-point.	Hair Hy- grometer.	Old Stand. Barometer at 32°.	New Stand. Barometer.	Thermome- ter in air.	Depression of wet-bulb.	Do. by Les- lie's Hygro.	Dew-point.	Hair Hy- grometer.	Central tension of vapour by Do. by hair hygrom.	Ditto by Hygrom.			On the ground.	At elevation 45 feet.	10 A. M.	4 P. M.
1	30.090	30.055	69.7	12.0	11.2	45.0	69	30.093	29.916	79.3	21.6	18.8	44.0	55	15	96	31		clear	clear	clear	clear.
2	0.046	0.066	69.6	12.0	10.8	46.0	67	0.936	29.861	79.3	20.1	18.2	43.0	54	18	95	28		do	do	do	do
3	0.111	29.975	68.1	10.1	9.4	47.2	74	0.862	29.895	77.9	18.7	17.5	44.0	56	22	94	33		do	do	hazy cir.	hazy cir. st.
4	29.971	337	69.0	9.0	9.0	52.0	81	0.862	29.895	77.9	18.7	17.5	44.0	56	20	93	33		do	do	hazy cir.	hazy cir. st.
5	0.960	354	70.1	5.9	3.5	52.0	89	0.862	29.895	77.9	18.7	17.5	44.0	56	30	37	34		do	do	hazy cir.	hazy cir. st.
6	0.982	354	72.1	5.9	3.5	52.0	89	0.862	29.895	77.9	18.7	17.5	44.0	56	38	38	42		do	do	hazy cir.	hazy cir. st.
7	0.966	358	75.3	8.7	7.1	54.2	81	0.862	29.895	77.9	18.7	17.5	44.0	56	30	33	33		do	do	hazy cir.	hazy cir. st.
8	30.093	30.043	72.5	11.2	10.0	51.2	76	0.862	29.895	77.9	18.7	17.5	44.0	56	35	40	33		do	do	hazy cir.	hazy cir. st.
9	1.112	0.74	71.9	8.9	6.9	54.6	73	0.862	29.895	77.9	18.7	17.5	44.0	56	32	35	35		do	do	hazy cir.	hazy cir. st.
10	0.004	0.65	71.5	10.9	11.1	54.6	73	0.862	29.895	77.9	18.7	17.5	44.0	56	27	31	31		do	do	hazy cir.	hazy cir. st.
11	0.035	0.34	72.7	7.7	7.2	54.6	76	0.862	29.895	77.9	18.7	17.5	44.0	56	38	42	42		do	do	hazy cir.	hazy cir. st.
12	0.335	0.87	72.7	9.9	9.0	54.6	81	0.862	29.895	77.9	18.7	17.5	44.0	56	40	42	42		do	do	hazy cir.	hazy cir. st.
13	0.436	0.89	74.6	9.8	9.1	54.6	81	0.862	29.895	77.9	18.7	17.5	44.0	56	42	42	42		do	do	hazy cir.	hazy cir. st.
14	0.436	0.89	74.6	9.8	9.1	54.6	81	0.862	29.895	77.9	18.7	17.5	44.0	56	42	42	42		do	do	hazy cir.	hazy cir. st.
15	0.013	29.970	74.3	3.6	3.0	60.0	92	0.862	29.895	77.9	18.7	17.5	44.0	56	46	46	46		do	do	hazy cir.	hazy cir. st.
16	29.970	320	77.5	6.4	6.9	61.0	91	0.862	29.895	77.9	18.7	17.5	44.0	56	48	48	48		do	do	hazy cir.	hazy cir. st.
17	0.000	0.45	76.1	7.4	8.9	61.0	91	0.862	29.895	77.9	18.7	17.5	44.0	56	55	56	56		do	do	hazy cir.	hazy cir. st.
18	0.000	0.45	76.1	7.4	8.9	61.0	91	0.862	29.895	77.9	18.7	17.5	44.0	56	58	58	58		do	do	hazy cir.	hazy cir. st.
19	0.000	0.45	76.1	7.4	8.9	61.0	91	0.862	29.895	77.9	18.7	17.5	44.0	56	57	57	57		do	do	hazy cir.	hazy cir. st.
20	0.003	0.56	74.7	13.2	14.8	47.0	66	0.862	29.895	77.9	18.7	17.5	44.0	56	52	56	52		do	do	hazy cir.	hazy cir. st.
21	0.020	0.87	77.5	5.5	6.9	56.7	79	0.862	29.895	77.9	18.7	17.5	44.0	56	35	33	35		do	do	hazy cir.	hazy cir. st.
22	0.935	0.90	75.7	3.5	4.4	69.0	91	0.862	29.895	77.9	18.7	17.5	44.0	56	37	37	37		do	do	hazy cir.	hazy cir. st.
23	0.990	0.83	78.4	5.0	4.5	69.0	92	0.862	29.895	77.9	18.7	17.5	44.0	56	61	61	61		do	do	hazy cir.	hazy cir. st.
24	0.811	0.74	80.1	8.0	8.2	56.4	83	0.862	29.895	77.9	18.7	17.5	44.0	56	41	31	41		do	do	hazy cir.	hazy cir. st.
25	0.645	0.63	79.0	6.6	7.2	54.0	85	0.862	29.895	77.9	18.7	17.5	44.0	56	54	54	54		do	do	hazy cir.	hazy cir. st.
26	0.946	0.90	77.0	2.5	3.0	72.0	93	0.862	29.895	77.9	18.7	17.5	44.0	56	45	45	45		do	do	hazy cir.	hazy cir. st.
27	0.916	0.76	79.6	4.5	5.3	67.6	89	0.862	29.895	77.9	18.7	17.5	44.0	56	43	50	43		do	do	hazy cir.	hazy cir. st.
28	0.990	0.47	81.0	8.7	8.7	65.0	82	0.862	29.895	77.9	18.7	17.5	44.0	56	29	29	29		do	do	hazy cir.	hazy cir. st.
Mean.	29.997	29.952	74.5	8.0	8.1	56.8	81			82.0	15.6	14.0	50.7	65	36	38			change.			one shower.

For a few days the want of ice prevented my noting the dew point. Ice from Hooghly then supplied the deficiency. — A drought and famine prevails in the north-west.

